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RESPONSE ACTION OUTCOME (RAO) STATEMENT REPORT

515 Somerville Avenue
Somerville, Massachusetts 02143-3238

Release Tracking Number (RTN) 3-28548
RTN 3-23606 (Partial)
ACOP-NE-09-3E009

Party Assuming Responsibility for the IRA:

World 115 Nominee Trust
P.O. Box 95025
Newton, MA 02495
Attn.: Mr. Mark Coppola, Trustee

Licensed Site Professional (LSP) for the RAO:

Ms Marcia J. Berger, LSP #4667
Clean Properties, Inc.
111 Boston Post Road
Suite 211
Sudbury, MA 01776

June 3, 2011

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Environmental Assessment & Cleanup

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June 3, 2011

Massachusetts Department of Environmental Protection
Northeast Regional Office
205B Lowell Street
Wilmington, MA 01887

Re: Response Action Outcome (RAO) Statement Report
515 Somerville Avenue, Somerville, MA
Release Tracking Numbers (RTNs) 3-28548 + 3-23606 (Partial)

To Whom It May Concern:

Clean Properties, Inc., has prepared this Response Action Outcome (RAO) Statement for the above-referenced release site identified by RTN 3-28548 (Site) and part of encompassing RTN 3-23606 on behalf of World 115 Nominee Trust (the property owner) in accordance with the provisions of the Massachusetts Contingency Plan (MCP), 310 CMR 40.0000, and Administrative Consent Order ACOP-NE-09-3E009.

The RAO Transmittal Form (BWSC-104) and this report were submitted electronically through eDEP.

1.0 — INTRODUCTION

The Property encompassing the Site is located on the northwest corner of the intersection of Somerville Avenue and Laurel Street in the City of Somerville, as shown on the Locus Map (***Figure 1***). The release Site is located in the southern portion of the Property, bordering the sidewalk along the north side of Somerville Avenue, as shown on the Site Plan (***Figure 2***). No sensitive resources are located on the Property or adjoining properties, as indicated by the MassGIS Bureau of Waste Site Cleanup (BWSC) Priority Resources Map (***Figure 3***).

RTN 3-28548 identifies the potential release or threat of release that was reported on June 9, 2009, when two 1,000-gallon previously closed-in-place gasoline underground storage tanks (USTs) being removed from the southern portion of the Property were opened and allowed to remain uncontrolled over night — constituting a 2-hour reporting condition. An IRA Plan for response actions required to address this condition was submitted to the MassDEP on September 3, 2009.

RTN 3-23606 identifies the presence of elevated Petroleum Hydrocarbons, Polynuclear Aromatic Hydrocarbons (PAHs), and metals in soil and groundwater across the entire Property, as reported on February 13, 2004, and continuing in Phase IV. The release site was classified Tier II in a February 17, 2005, Phase I Initial Site Investigation (ISI) Report and Tier Classification Submittal prepared by Rizzo Associates on behalf of previous property owner John Solomon International. A RAM Plan for the release was submitted to the MassDEP in October 2007 and was last modified in May 2009 by Sanborn Head & Associates on behalf of World 115 Realty Trust. RAM Status Reports

relative to the RAM Plan were submitted to the MassDEP in September 2009, February 2010, August 2010, and February 2011. Phase II Comprehensive Site Assessment (CSA) and Phase III Remedial Action Plan (RAP) Reports for this site were submitted to the MassDEP on May 1, 2010, by Action Environmental Boston on behalf of World 115 Nominee Trust; and a Phase IV Remedial Implementation Plan (RIP) was submitted on July 1, 2010. This RAO for RTN 3-28548 serves as a partial RAO for RTN 3-23606, covering the spatial area of RTN 3-28548 as identified within the Property and encompassing site RTN 3-23606.

Two (2) other active release sites are identified associated with the Property:

RTN 3-28545 identifies the release of approximately 20 gallons of suspected hydraulic oil spilled from a previously unknown 100-gallon UST that was encountered during excavations for RTN 3-23606 — constituting a 2-hour reporting condition that was reported on June 9, 2009. The UST was removed and disposed appropriately. The release occurred north of the UST beds that are the subject of this RAO Report, encompassing urban soils also identified as containing visible bulk materials containing asbestos. An IRA Plan for response actions required to address this release was submitted to the MassDEP on September 3, 2009; and IRA Status Reports were submitted to the MassDEP in December 2009, July 2010, and January 2011. A Phase I ISI Report and Tier Classification submittal was filed with the MassDEP for the site on June 9, 2010, with the site classified Tier II based on a Numerical Ranking Score (NRS) of 176.

RTN 3-28546 identifies the release of Stoddard Solvent identified on June 9, 2009, by the measurement of a PID Jar Headspace reading greater than 100 ppmv associated with soil near the UST at the time of its removal — constituting a 72-hour reporting condition. An IRA Plan for response actions required to address this condition was submitted to the MassDEP on September 3, 2009. Liquid UST contents were removed by a pump truck and disposed off-site at a commercial vendor. Sludge in the UST was transferred to a roll-off dumpster and subsequently disposed at General Chemical Corporation of Framingham, Massachusetts. The USTs were cleaned and disposed at a State-licensed tank yard, with drummed cleaning wastes and personal protection equipment (PPE) subsequently disposed at General Chemical Corp. IRA Status Reports were submitted in December 2009, July 2010, and January 2011. A Phase I ISI Report and Tier Classification submittal was filed with the MassDEP relative to the site on June 9, 2010, with the site classified Tier II based on a NRS of 131.

One (1) additional closed release site is identified as associated with the Property:

RTN 3-04350 identifies the presence of elevated Petroleum Hydrocarbons, Lead, and PAHs in soil and the presence of Petroleum Hydrocarbons and several Volatile Organic Compounds (VOCs) including tetrachloroethene in groundwater near the former John Solomon International loading dock, drive, and west storage yard. The contaminant conditions were identified during a June 1990 due diligence assessment that targeted the former location of a 1,000-gallon underground gasoline storage tank. In July 1993, a total of 77.86 tons of Petroleum-impacted soil was excavated from the west storage yard to deepen the loading dock and recycled at an off-site asphalt-batching facility. Based on a Method 3 Risk Characterization, Rizzo Associates submitted a Class A-2 Response Action Outcome (RAO) Statement relative to the release on November 14, 1995, on behalf of then property owner John Solomon International. The 1,000-gallon tank was closed in-place with concrete fill prior to 1992 and was removed on June 9, 2009. Closure conditions associated with this site apply to some of the contaminant conditions identified associated with overlapping release sites RTN 3-23606, 3-28545, and 3-28546.

RTN 3-28548, the subject of this RAO Report, overlaps only RTN 3-23606 and therefore serves as a Partial RAO for RTN 3-23606.

2.0 — CONTACT INFORMATION

This RAO is being undertaken by the Property Owner:

World 115 Nominee Trust
P.O. Box 95025
Newton, MA 02495
% Mr. Mark Coppola, Trustee
617-969-4154

This RAO is being overseen by Clean Properties Licensed Site Professional (LSP):

Marcia J. Berger, LSP #4667
Clean Properties, Inc.
111 Boston Post Road, Suite 211
Sudbury, MA 01776
Phone: 978-443-6622

3.0 — SITE DESCRIPTION

The Property encompassing the Site of RTN 3-28548 is located on 1985 U.S. Geological Survey (USGS) 7.5x15-minute Boston North, Massachusetts, metric topographic Quadrangle 42071-D1-TM-025 (***Figure 1***). The Property is identified in City of Somerville Assessors Office files as 46,852-square-foot (1.0755-acre) Parcel 52/H/38//, assigned an address of 515 Somerville Avenue (a primary thoroughfare in the City). The Property has 229.59 feet of frontage on the north side of the Avenue, 149.45 feet of frontage on the west side of Laurel Street, and extends within 118.5 feet of Central Street on the west with a right-of-access from that Street across a west-adjoining parcel at 7 Central Street (***Figure 2***). The Property currently is vacant and undeveloped, except for part of an approximately 1,230-square-foot warehouse building (unoccupied and awaiting replacement of portions of its exterior walls) on the north side of the Property's northwest quadrant and an adjoining approximately 4,000-square-foot concrete pad that formerly was a building slab. The north and south sides of the concrete pad consist of 10- to 20-foot high concrete retaining walls that hold back the developed surfaces of adjoining residential parcels.

Historically, the central portion of the Subject Property was developed with an approximately 25,775-square-foot single-story masonry industrial building, the core of which was constructed in about 1924 (***Figure 2***). Until demolition of nearly all of the building in 2009, the industrial building was used as an automotive garage (1924-1950), a uniform supply and cleaning company (1950-1972), and a textile cutting and seaming company (1972-2002). The western portion of the building was added in 1972 for apparel manufacture. The loading dock for that portion of the building was redeveloped in 1993, when a garage also was added to the northwestern corner of the building; and the east parking lot was constructed on former residential lots along Laurel Street. Known chemical uses associated with these activities at the Property consist of petroleum-based motor-vehicle fluids and presumably their solvents, fuel oils (#2 and #4 fuel oil), and Stoddard Solvent. Only gasoline is known to have been used and dispensed within the Site area on the Property.

The Property currently is proposed for redevelopment for commercial purposes, consistent with most nearby other properties along Somerville Avenue. The proposed 4-story building will front on Somerville Avenue and Laurel Street (***Figure 4***), with retail and/or business services on the first floor, general and medical offices on the second floor, and general offices and possible residential units splitting the third and fourth floors (***Figure 5***).

The Property occupies the southeastern toe of the Spring Hill drumlin, which is oriented northwest/southeasterly, consistent with southeasterly movement of the depositing glacier approximately 12,000 years ago. The drumlin crests at an elevation of 132 feet (40 meters) above mean sea level approximately 2,070 feet northwest of the Subject Property. Ground surfaces on the Property generally slope gently southeasterly off the drumlin, with the northwestern corner of the

Property at an elevation of approximately 21 feet (6.5 meters) and the southern boundary of the Property at an elevation of approximately 15 feet (4.5 meters), 1-2 feet below the grade of the south-bounding municipal sidewalk along Somerville Avenue.

The Site of RTN 3-28548 is located along the southern boundary of the Property approximately 77-125 feet east of the Property's southwest corner. The approximate center of the Site is located at 42°22'59.63" North latitude and 71°06'21.21" West longitude (***Figure 1***), corresponding to UTM coordinates 4,694,467 meters North and 190,326,601 meters East. The Site boundaries closely approximate the former gasoline tank beds, extending beneath the municipal sidewalk on the south side of the Property (***Figure 2***).

3.1 — Site Conditions

The Site of RTN 3-28548 along the southern boundary of the Property consists of sparsely vegetated sandy soil (***Photo 1***) exposed following the removal of the former building in 2009 (***Figure 2***). The Property encompassing the Site is enclosed within a six-foot high chain-link fence fitted with mesh privacy screening. Current access to the Property is available only through the locked gate via the right-of-way drive from Central Street.

3.2 — General Historic Use of the Site

City Fire Department records indicate that the Alger Brothers garage at 515 Somerville Avenue was issued a permit in May 1924 for the storage of 2,000 gallons of gasoline in underground storage tanks — a permit that was renewed in 1935-1936. These tanks are depicted on Sanborn Company 1933 and 1950 Fire Insurance Maps as located beneath the floor of the southern portion of the garage building (***Figure 6***). The uniform supply and cleaning company occupied the building from 1950 until 1972. The fill pipes for these tanks reportedly were covered by office carpeting and were not identified until Solomon Apparel International vacated the building in 2002. The USTs and preliminarily identified impacted soils were removed in June 2009. Remaining remediation wastes were subsequently disposed of off-site, with Site boundaries defined by excavation limits.

3.3 — Surrounding Receptors

The Property encompassing the Site currently is vacant. Maintenance workers for World 115 Nominee Trust periodically visit the Property to remove weed growth, maintain fencing and screening, and otherwise control Site conditions. Similarly, environmental contractors periodically visit the Property to conduct ongoing assessment activities. Although the Property is secured by locked fencing, the occurrence of periodic new graffiti attests to trespass by neighborhood youths.

Based on the 2007 City Census, approximately 14,252 people reside within 0.50 mile of the Site. Adjoining and nearby properties along Somerville Avenue consist principally of retail and other commercial businesses and offices, with the occasional multiple-family residence mixed in — consistent with the "BA" zoning of the area. Adjoining properties to the north and along Laurel Street consist principally of low- to moderate density residences — consistent with the "RB" zoning of the area. The nearest residential property to the Site is located approximately 75 feet south (hydrologically downgradient) across Somerville Avenue at 516 Somerville Avenue.

No institutions, as defined in the MCP, are located within 500 feet of the Site. The closest institution identified on the MassGIS data layers is the Somerville Home (a rest home for the elderly) at 117 Summer Street, approximately 1085 feet north-northeast of the Site.

Natural resources areas in the vicinity of the Site are identified on the MassDEP Priority Resources Map (***Figure 3***). No surface-water features are identified within 500 feet of the Site, the nearest being the Charles River approximately 2,000 feet southwest of the Site. No MassDEP- or National Wetlands Inventory (NWI)-mapped wetlands, Federal Emergency Management Agency (FEMA) floodplains, or Areas of Critical Environmental Concern (ACEC) are identified within 0.25 mile of the Site. No ACECs, Living Waters Core Habitats or Critical Supporting Watersheds or other fish habitat, or Priority Habitats and Estimated Habitats of Rare Species identified by the Massachusetts Natural Heritage and Endangered Species Program (NHESP) are identified within 500 feet of the Site. The Site is not located in a Sole Source Aquifer, groundwater Zone II or an Interim Wellhead Protection Area (IWPA), a surface-water Zone A, or other drinking-water protection district. The Somerville Health Department reported that there are no private drinking-water supply wells in the vicinity of the Site.

Local, State, and/or Federal Protected Open Space in the vicinity of the Site includes the 2.92-acre City of Somerville Conway Playground approximately 260 feet west-southwest of the Site on the south side of Somerville Avenue. Adjoining the Playground on its west side is the 1.70-acre Massachusetts Department of Conservation & Recreation Veterans Memorial Park skating rink, approximately 520 feet west of the Site.

3.4 — Site Hydrogeologic Characteristics

Based on borings performed in the vicinity of the Site (***Appendix A***), approximately 1.5-8 feet of disturbed sandy fill is present at the surface, containing relatively small but highly variable amounts of ash and coal and fragments of brick, concrete, and other construction debris from past building activities. Underlying native soils consist of stratified fine- to coarse-grained sand with limited gravel and stringers of silt, characteristic of the glacial outwash deposits in the area.

The maximum explored depth in the vicinity of the Site was approximately 20 feet below existing surface grade or approximately 22 feet below former building floor grade. Bedrock has not been encountered at the Site. The nearest bedrock well identified in the MassDEP database was at 75 Oak Street approximately 3,570 feet southeast of the Site, where bedrock was encountered 60 feet below grade. Based on geologic maps of the area prepared by Zen and others (1983), Goldsmith (1991), and Skehan (2001), this bedrock consists of Cambridge slate (aka Cambridge argillite). The Proterozoic Ƶ to earliest Paleozoic-aged Cambridge slate consists of eugeosynclinal marine mudstones, minor quartzite, and rare dirty sandstone and conglomerate. The formation generally is described as compact, with slate-like joints usually filled with micaeous and chloritic muck, limiting its permeability and aquifer potential; however, its surface may be more fractured and plucked by past glacial movement over its surface.

Depth of groundwater at the Site has ranged from 8.50-10.68 feet below grade between March 3, 2010, and February 4, 2011. Groundwater flow at the Site has been determined to be south-southeasterly at a gradient of approximately 0.012 foot per foot (***Figure 7***). Based on identified soil types, the estimated hydraulic conductivity value of the overburden aquifer is 28 feet per day (Table 2.2 of Freeze and Cherry, 1979). Assuming a porosity of 0.39, the rate of groundwater flow at the Site would be approximately 47.8 feet per year.

4.0 — RELEASE DESCRIPTION

On June 8, 2009, the two 1,000-gallon gasoline USTs that had been abandoned beneath the office portion of the building were exposed during RAM activities for RTN 3-23606 associated with building demolition, performed under oversight by Sanborn, Head & Associates. The USTs were determined to be oriented with their long axes parallel to Somerville Avenue and with their south walls approximately six (6) feet north of the newly reinstalled municipal sidewalk along the north side of Somerville Avenue. The excavation contractor (Tufts, Inc., of Somerville, Massachusetts) ruptured the tanks while uncovering them. The damaged tanks were observed by the MassDEP during a June 9, 2009, site inspection and were determined by the MassDEP to constitute a threat of a sudden release — thereby constituting a 2-Hour Reporting Condition pursuant to 310 CMR 40.312. Oral notification was provided to the MassDEP, resulting in identification of the Site by RTN 3-28548. Limited Immediate Response Action (IRA) activities were verbally approved at the time of notification; and a written IRA Plan was submitted on September 3, 2009.

The June 9, 2009, oral approval for the IRA authorized:

1. Removal and off-site disposal of the tank contents;

2. Cleaning and removal of the tanks;

3. Investigation of soil conditions adjacent to the USTs;

4. Excavation and off-site disposal of up to 20 cubic yards of impacted soil; and

5. Conduct of a geophysical survey of the Property to search for indications of other possible unknown USTs.

The September 3, 2009, written IRA Plan further specified:

6. Excavation of additional impacted soil if initial testing of excavation perimeters indicated that it was warranted;

7. Characterization and off-site disposal at an appropriate facility of excavated gasoline-impacted soil;

8. Backfilling of the excavation with non-impacted formation material; and

9. Installation of a monitoring well in the tank grave area to evaluate whether groundwater was impacted by the release.

During June 10-11, 2009, tank excavation and removals, Sanborn Head & Associates screened soil exposed around the tanks for the presence of VOCs with a PID in accordance with the MassDEP Jar Headspace Method, pursuant to MassDEP Policy #WSC-402-96. PID measurements as high as 320 parts per million by volume (ppmv) were determined, constituting a 72-Hour Reporting Condition pursuant to 310 CMR 40.0313(2). The elevated PID determination was reported to the MassDEP, which concluded that the PID determination documented the same release as the original threat; so a new Release Tracking Number was not assigned.

4.1 — <u>Immediate Response Actions Conducted</u>

As documented in the written IRA Plan, the contents of the gasoline USTs were pumped using a vacuum truck on June 9, 2009, under the oversight of Sanborn Head & Associates. Approximately 495 gallons of gasoline and water were transported to Global Companies, LLC, in Albany, New York, for treatment and disposal (see ***Appendix B***). On June 10-11, 2009, the two gasoline USTs were cleaned by Removal Specialists of Lynn, Massachusetts, and transported to the State-licensed tank yard of Turner Trucking and Salvage of Lynn, Massachusetts, for disposal. Unpumpable fluids in the tanks were transferred by Removal Specialists to two 55-gallon drums provided by Tufts, Inc., for subsequent disposal. An additional drum was to used to contain personal protective equipment (PPE) contaminated during cleaning of the tanks. Under Action Environmental Boston oversight, the drums were transported by CycleChem to its affiliated General Chemical Corporation facility in

Framingham, Massachusetts, on August 25, 2011 (see ***Appendix B***). Subsequent testing of drum contents at the facility identified unexpected concentrations of PCBs in the gasoline wastes (9.8-11.5 ppm). Based on the absence of detected PCBs in other wastes and source-material samples, the material was determined not be regulated by the Toxic Substance Control Act (TSCA). Based on the results of wipe testing of the interior walls of the PPE drum by General Chemical Corporation, the PCBs were attributed to reuse of contaminated drums (provided by UST-removal contractor Tufts, Inc.) and not to local contaminant sources.

Based on PID measurements performed by Sanborn, Head & Associates, soil that appeared to be gasoline-impacted was excavated by Tufts, Inc., and placed on and covered by polyethylene sheeting and then transferred to a roll-off container provided by Removal Specialists. A composite sample of the gasoline-impacted soil was collected by Sanborn, Head & Associates on June 12, 2009, for waste characterization (identified as "Southern Gas Tank Solids" in Alpha Analytical Report L0907777, see ***Appendix C***), with no detectable PCBs identified. On August 31, 2009, the gasoline-impacted soil (14.49 tons) was transported by Removal Specialists to Aggregate Recycling Corporation of Eliot, Maine, for disposal (see Bill of Lading in ***Appendix B***).

Following excavation, soil samples were collected by Sanborn, Head & Associates from tankbed walls and floor to confirm that impacted soils had been adequately removed. Laboratory analytical reports for soil sample analysis of Volatile Petroleum Hydrocarbon (VPH) and Extractable Petroleum Hydrocarbon (EPH) fractions and targets were included in the IRA Plan (Alpha Analytical Report L0907709 in ***Appendix C***), but data evaluation was not performed at the time. Sanborn Head & Associates subsequent data review determined that impacted soil had been adequately removed. At Sanborn, Head & Associates' request, Removal Specialists backfilled the excavation with unimpacted formation materials.

The analytical data for the initial tankbed closure soil samples collected by Sanborn Head & Associates are summarized in ***Table 1***, with sample locations depicted on ***Figure 8***. All gasoline- and diesel-indicator contaminants in these soil closure samples were determined to be present at concentrations less than Method 1 Soil S-1 Risk Criteria for a Groundwater GW-2/3 setting, except the soil sample from the south excavation wall of the southwest UST. Because this wall was excavated beneath the adjoining paved sidewalk, Soil S-3 Risk Criteria are applicable, which the soil sample did not exceed.

On February 18, 2010, Bronson Drilling of Cambridge, Massachusetts, installed a 16-foot deep boring in the former tankbed (AE-103 on ***Figure 8***) under the oversight of Action Environmental Boston. Encountered soils were stratigraphically described and screened in the field for the presence of VOCs using a PID in accordance with the MassDEP Jar Headspace Method, as documented on the boring log in ***Appendix A***. No detectable VOCs were identified during PID screening. Soil from the surface exposure at the Site (0-3 feet) was analyzed for EPH and Target PAHs and RCRA 8

Metals to verify that the locally derived "formation" backfill was not impacted from other Property activities (see March 2010, New England Testing Laboratory Analytical Reports V0219-20 and V0219-20A in ***Appendix C***). No exceedances of MCP Soil S-1 Reportable Concentrations were identified. Boring AE-103 was converted to a monitoring well, and an additional eight borings/monitoring wells were installed elsewhere on the Property.

On January 19, 2011, Bronson Drilling Company under the oversight of Action Environmental Boston collected new push-probe soil samples from the approximate locations of each of the sidewall and floor samples previously collected from the tankbed by Sanborn, Head & Associates (see ***Figure 8***). A composite soil sample from the sidewall sample locations and a composite soil sample from the tankbed floor sample locations were submitted to New England Testing Laboratory for analysis of PCBs (see Laboratory Report W0125-31 in ***Appendix C***). No PCBs were identified in either sample above the analytical method lower detection limit — consistent with the conclusion that the PCBs detected in the drummed gasoline were attributable to reused contaminated drums.

Various environmental consultants installed 20-foot borings GP-5, GP-4, and SH-7 nearby on the Property to the Site, as documented in Action Environmental Boston's June 9, 2010, Phase I Initial Site Investigation Report relative to the Site. These borings serve to define Property conditions near but outside the Site. Soil samples collected from the 8-12 foot depth in November 13, 2002, Rizzo Associates boring GP-4; the 4-8 foot depth in November 13, 2002, Rizzo Associates boring GP-5; and the 3-4 foot depth in September 24, 2003, Sanborn, Head & Associates boring SH-7 also were identified to contain no MCP Soil S-1 Reportable Concentrations of VPH, EPH, or their Targets (***Table 2***).

On March 3, 2010; June 9, 2010; September 9, 2010; and February 4, 2011, Action Environmental Boston sampled monitoring well AE-103 and other existing monitoring wells at the Property using modified U.S. Environmental Protection Agency (USEPA) low-flow groundwater sampling protocols. The groundwater samples were analyzed by New England Testing Laboratory for VPH and EPH and their Targets, with laboratory analytical reports included in ***Appendix C***. No contaminant concentrations have been identified in Site groundwater above analytical method lower detection limits (***Table 3***) — indicating that Site groundwater has not been impacted by the gasoline release.

On March 2, 2010, and March 5, 2010, Radar Solutions International conducted ground-penetrating radar (GPR), electromagnetic induction, and magnetometer surveys were performed across the Site and across the remainder of the Property (***Appendix D***). No magnetic or radar anomalies were identified in the vicinity of the Site that could indicate an unknown additional UST or similar subsurface structure.

On August 7, 2009, the MassDEP issued an Administrative Consent Order with Penalty (ACOP) and Notice of Noncompliance (NON) to World 115 Nominee Trust relative to the Site (and additional RTNs 3-23606 and 3-28545) for failure to make timely MCP submittals. A revised response schedule was agreed upon in December 2009, setting the following requirements for the Site:

- By January 3, 2010, submit an IRA Status Report relative to RTN 3-28548 and additional IRA Status Reports every six months thereafter until an IRA Completion Report is submitted; and

- By June 9, 2010, submit a Phase I Report and Tier Classification Submittal relative to RTN 3-28548, unless a RAO Statement, Remedy Operation Status Submittal, or Downgradient Property Status Submittal is submitted.

IRA Status Reports relative to RTN 3-28548 were submitted on December 31, 2009, June 29, 2010, and January 3, 2011 — consistent with ACOP requirements. An IRA Completion Report relative to RTN 3-28548 was submitted on February 24, 2011.

The Phase I Report and Tier Classification Submittal relative to RTN 3-28548 was submitted on June 8, 2010 — consistent with ACOP requirements.

4.2 — Summary of Remediation Waste Management

The liquid contents (495 gallons) of the former gasoline USTs were removed by pump truck on June 9, 2009, and disposed at Global Companies, LLC, in Albany, New York, as documented in the IRA Plan.

Solids (14.5 tons) removed from the gasoline USTs and impacted soils in the tank beds (based on field screening) were transferred to a roll-off on June 9-10, 2009, and sampled for waste characterization. This materials was transported to Aggregate Recycling Corporation of Eliot, Maine, for disposal, as documented in the IRA Plan.

Two 55-gallon drums of unpumpable tank contents and one 55-gallon drum of used personal-protection equipment (tyvek suits, gloves, etc.) were disposed from the Site by Cycle Chem (General Chemical) on August 25, 2010.

No other remedial wastes were generated requiring disposal.

4.3 — Conceptual Site Model

The following Conceptual Model of the Site was developed from environmental testing at the Site and information available from nearby locales, particularly including other locations at the Property encompassing the Site.

The Site is located on the toe of a drumlin hill that slopes downward in a south-southeasterly direction. The groundwater flow direction determinated at the Property encompassing the Site is consistent with that "regional" topographic gradient — being 0.012 foot per foot south-southeasterly (***Figure 7***).

A release of gasoline from the two former 1,000-gallon USTs beneath the building at the Site impacted shallow soils. Based on the limited extent of impact, Sanborn, Head & Associates concluded in their September 3, 2009, IRA Plan that the release was a result of spillage during UST removal, following the UST ruptures by tank removal contractor Tufts, Inc. Some of the spillage apparently migrated into and was adsorbed by a relatively silt-rich strata beneath the downslope sidewalk. Based on field screening for VOCs using a PID in accordance with the MassDEP Jar Headspace Method, impacted soil (14.49 tons) was excavated, stored in a roll-off container, and transported to an off-site facility for reuse/disposal. The adjoining excavated tankbeds comprised an area approximately 36 feet long (east/west), 15 feet wide (north/south), and 6-7 feet deep. Excavation was terminated south of the western tank to prevent potential collapse of the sidewalk, although relatively elevated PID measurements were still being obtained. Only this small area of soil beneath the sidewalk is identified as containing petroleum hydrocarbons at concentrations exceeding MCP Method 1 Soil S-1 Risk Criteria. Groundwater was not encountered during the excavation but was determined in a subsequent monitoring well to be 8.5-10.7 feet below grade. Based on the results of groundwater testing, spillage did not reach or leach to the groundwater. No Non-Aqueous Phase Liquid (NAPL) was detected in the monitoring well at the Site.

5.0 — RISK ASSESSMENT

In order to determine whether the Site has been restored to a Condition of No Significant Risk, Clean Properties elected to evaluate current Site conditions using a Method 1 Risk Characterization, pursuant to 310 CMR 40.0973. A Method 1 Risk Characterization is appropriate for this Site because:

- No persistent odors are present in ambient air (no building being present within 30 feet of the Site);
- Affected media are limited to soil and groundwater;

- Contaminants of Concern (CoCs) are limited to petroleum products and are not known to bioaccumulate;
- Method 1 Risk Criteria exist for the CoCs at the Site; and
- All Exposure Point Concentrations (EPCs) are below applicable Method 1 Risk Criteria.

5.1 — Current and Foreseeable Site Uses

Currently, the Property encompassing the Site is undeveloped and unoccupied. Historically, the Property was used commercially and/or residentially.

The Property borders Somerville Avenue, a main artery that is developed principally with commercial or multiple-family residential buildings. Residences dominate properties set back from the thoroughfare.

Proposed development of the Property is with a mixed-use commercial building, with retail and/or office uses on the ground floor and offices and/or residential units on upper floors (see ***Figure 5***). The proposed building footprint will cover nearly all of the Site (see ***Figure 4***), with only a small portion of the southwestern corner of the Site to lie within the landscaped verge that will separate some of the building from the municipal sidewalk. City Building Department requirements stipulate that the building's foundation grade will be approximately two feet below that of the bordering municipal sidewalk.

In the absence of Activity and Use Limitations (AULs), foreseeable use of the Property could include single-family residential development, although such development would not be considered to constitute highest-and-best use of the Property from an economic perspective. Accordingly, the Risk Assessment assumes residential exposure may occur.

5.2 — Identification of Applicable Soil Categories

The MCP establishes Method 1 Risk Criteria for three soil categories (S-1, S-2, and S-3) based on a matrix of soil accessibility and human exposure potential, as follows:

	RECEPTOR CHARACTERISTICS							
	CHILDREN PRESENT				ADULTS ONLY PRESENT			
	HIGH FREQUENCY		LOW FREQUENCY		HIGH FREQUENCY		LOW FREQUENCY	
Accessibility of Soil	High Intensity	Low Intensity	High Intensity	Low Intensity	High Intensity	Low Intensity	High Intensity	Low Intensity
ACCESSIBLE (SURFICIAL) SOIL 0⇨3 Feet (unpaved)	**CATEGORY S-1**			**S-2**	**S-1**	**CATEGORY S-2**		
POTENTIALLY ACCESSIBLE SOIL 3 ⇦ 15 Feet (unpaved) or 0 ⇦ 15 Feet (paved)		**CATEGORY S-2**			**S-2**	**CATEGORY S-3**		
ISOLATED SUB-SURFACE SOILS >15 Feet or under the footprint of a building or permanent structure	**CATEGORY S-3**							
Category S-1 also applies to any accessible soil where the current or reasonably foreseeable use of the soil is for growing fruits and vegetables for human consumption. Pursuant to 310 CMR 40.0933(9).								

Soil category S-1 represents the highest potential for exposure and assumes unrestricted use of the Site (i.e., residential). Soil category S-3 represents the lowest potential for exposure and it typically applicable to isolated soil (i.e., under a permanent structure or deeper than 15 feet below grade).

Assuming unrestricted use of the Site, soil category S-1 is applicable above 15 feet below grade; and soil category S-3 is applicable below 15 feet below grade. Because municipal sidewalks and roadways are considered to be permanent structures, soil category S-3 also applies to soil present below those structures.

5.3 — Identification of Applicable Groundwater Categories

The MCP establishes three risk categories for groundwater, pursuant to 310 CMR 40.0932:

> Groundwater Category GW-1 applies if the groundwater is located within a Current or Potential Drinking-Water Source Area;
>
> Groundwater Category GW-2 is intended to be protective of indoor air quality and applies to groundwater containing volatile contaminants that is located within 30 feet

of an existing or planned building or structure that is or will be occupied, when the average annual depth to groundwater in the area is 15 feet or less; and

Groundwater Category GW-3 is protective of surface-water ecology and applies to all groundwater in the Commonwealth.

Based on these conditions, Groundwater Category GW-3 is applicable everywhere at the Site and on the Property. Because all of the Site is located within 30 feet of the footprint of the proposed building on the Property and because groundwater at the Site is less than 15 feet below grade (ranging from 8-11 feet below grade), Groundwater Category GW-2 also is applicable everywhere at the Site.

5.4 — Identification of Contaminants of Concern

Contaminants of Concern (CoCs) in soil at the Site were selected primarily based on the release of virgin gasoline. The CoCs in soil therefore consist of Volatile Petroleum Hydrocarbon (VPH) C_5-C_8 Aliphatics, C_9-C_{12} Aliphatics, and C_9-C_{10} Aromatics; VPH Target VOCs Benzene, Toluene, Ethylbenzene, Xylenes, and Naphthalene (based on the contaminant's presence in at least one sample above analytical method detection limits); and gasoline additive Lead. Additionally, based on their detection in soil at the Site and their association with other releases on the Property, CoCs in soil also were identified as including Extractable Petroleum Hydrocarbons (EPH) C_9-C_{18} Aliphatics, C_{19}-C_{36} Aliphatics, and C_{11}-C_{22} Aromatics; and EPH Target Polynuclear Aromatic Hydrocarbons (PAHs) Phenanthrene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, and Benzo(g,h,i)perylene. Although not associated with known releases at the Property, concentrations of arsenic, barium, chromium, and mercury also were identified in soil above analytical method lower detection limits and were conservatively treated as CoCs for the purposes of Risk Assessment.

Because PCBs were detected in a disposal characterization sample of the unpumpable UST contents, PCBs were evaluated as potential CoCs. As discussed in ***Section 4.1***, wipe testing of the interior of the PPE drum also tested positive for PCBs, indicating that the used drums provided for disposal purposes were contaminated with PCBs from other sources. Soil disposal characterization samples ("Southern Gas Tank Solids") and composite soil samples collected from the sidewalls of the excavation area and the floors of the excavation area were determined to contain no detectable PCBs. Accordingly, PCBs were not attributed to the Site and were not identified as CoCs.

CoCs in groundwater at the Site also were identified as described above for soil. Based on detection above analytical method lower detection limits, no CoCs were identified in groundwater at the Site during four sequential seasonal sampling events and groundwater was not considered further in the Risk Assessment.

5.5 — Identification of Exposure Point Concentrations

An Exposure Point is a location of potential contact between a receptor and CoCs identified at the Site. Two Exposure Point conditions were identified at the Site — one corresponding to soil category S-1 (everywhere within the Site at the Property) and the second corresponding to soil category S-2 (beneath the sidewalk adjacent to the Property in the Site).

For each CoC, the Exposure Point Concentration (EPC) is the concentration of oil or hazardous material (OHM) in a specific medium that a human or environmental receptor may contact at any given Exposure Point. To be conservatively protective of future Site receptors, this Risk Assessment identified EPCs in soil as the maximum CoC concentration identified within an Exposure Point. Separate EPCs were determined for soil applicable to S-1/GW-2/3 Risk Criteria and for soil applicable to S-3/GW-2/3 Risk Criteria.

For each CoC, no EPC was identified in groundwater.

The Method 1 Risk Assessment which follows compares EPCs with applicable Method 1 Risk Criteria and Upper Concentrations Limits (UCLs). No exceedances of either risk condition are identified.

5.6 — Identification of Exposure Pathways

Petroleum hydrocarbons and other CoCs detected in soil in the Site on the Property are located at depths less than 15 feet below grade and currently are not isolated beneath a building or other permanent structure. Under the proposed development scheme, nearly all the Site soil area will be covered by the planned building and isolated from exposure (see ***Figure 4***).

Petroleum hydrocarbons and other CoCs detected in soil beneath the municipal sidewalk adjacent to the Property are isolated from exposure by the sidewalk, which is newly installed. Accordingly, no complete exposure pathway exists to this impacted soil.

Groundwater is not used at the Site or at nearby properties for potable supply or for irrigation. Therefore, no complete exposure pathway exists for groundwater, which also was determined to have no detectable CoCs.

5.7 — Risk to Human Health

Table 6 compares conservatively determined EPCs for Site CoCs with applicable Method 1 Risk Criteria and UCLs. No exceedances of applicable Method 1 Risk Criteria or UCLs were identified.

Proposed development is with a commercial building that will cover nearly all of the Site. Because a small area of soil containing detectable VOCs and concentrations of C_5-C_8 Aliphatic Petroleum Hydrocarbons and C_9-C_{10} Aromatic Petroleum Hydrocarbons that exceed MCP Method 1 Soil S-1 Risk Criteria will be within six feet horizontally of the proposed building (see ***Table 1***), soil at the Site has the potential to result in significant indoor air contaminant concentrations, pursuant to 310 CMR 40.0942(1)(d). Clean Properties notes that the identified soil concentrations do not exceed MCP Method 1 Soil S-2 Risk Criteria, considered to be conservatively protective of indoor air quality (see ***Table 1***). Action Environmental Boston further evaluated this potential for vapor intrusion using Level 1 Soil-Gas Screening methods pursuant to MassDEP Policy #WSC-02-411. Because soil with the highest contaminant impact was identified at the location of sample "SW Gas Tank 2 South Wall" beneath the south-bounding municipal sidewalk along Somerville Avenue, Action Environmental Boston installed a soil-gas probe four (4) feet deep beneath the sidewalk at that location, corresponding to a position within two (2) feet of the proposed building wall and at the depth of the proposed gravel sublayer beneath the proposed foundation slab. Soil gas was monitored using a PID equipped with a 10.6-eV ionization lamp that had been calibrated to respond quantitatively as if all VOCs were isobutylene. The maximum measured soil-gas PID reading was 1 ppmv, less than the lowest Hydrocarbon Fraction and Target VOC (4 ppmv for Ethylbenzene) identified by the MassDEP as likely to result in potential indoor air impact. Accordingly, indoor air impact to the building from the identified soil condition is not anticipated. Clean Properties also notes that building use (particularly ground-floor use) is not proposed to include pre-school, daycare, school, or residential uses; however, no Activity and Use Limitation (AUL) has been implemented that would preclude such use.

No soil conditions have been identified at the Site exceeding MCP Soil S-1 Risk Criteria for unrestricted use, except at one location beneath the south-bounding sidewalk ("SW Gas Tank 2 South Wall"). Determined contaminant concentrations at that location did not exceed applicable Method 1 Soil S-3 Risk Criteria (see ***Table 1***). The presence of the municipal sidewalk is considered to be a permanent structure that will preclude potential for direct contact exposure (including ingestion, dermal absorption, or inhalation).

Accordingly, a Condition of No Significant Risk is considered to exist relative to human health exposure.

5.8 — Risk to Safety

The risk of harm to safety was characterized for this Site and Property based upon information collected during the assessment and remediation activities. Pursuant to 310 CMR 40.0960, the MCP identifies several criteria that need to be considered in evaluating safety, including:

- The presence of rusted or corroded drums or containers, open pits, lagoons, or other dangerous structures [310 CMR 40.0960(3)(a)];
- The threat of fire or explosion [310 CMR 40.0960(3)(b)]; and
- Uncontained material that exhibits the characteristics of corrosivity, reactivity, or flammability, as described in 310 CMR40.0347.

No such materials or threats were observed or have been identified at the Site or Property. Geophysical surveys identified no buried metallic objects in the area likely to correspond to drums, tanks, or other large containers. In addition, remediation wastes have been removed from the Site; the excavations have been backfilled; and the Property is surrounded by a six-foot high security fence. The security fence will remain until Property redevelopment is finished.

Because no threat of physical harm or bodily injury to people was observed at the Site or within the Property boundaries, No Significant Risk of Harm to Safety exists at the Site.

5.9 — Risk to Public Welfare

Determination of the Risk to Public Welfare is conducted to identify and evaluate nuisance conditions that may be present at the Site and to identify and evaluate significant community effects. This determination is performed by considering such factors as nuisance conditions, loss of active or passive property use, and any non-pecuniary effects that may result in the degradation of public or private resources due to the identified OHM release at the Site. In addition, Risk of Harm to Public Welfare is evaluated by comparison of Site OHM concentrations to UCLs in soil and groundwater (310 CMR 40.0996).

At this time, following completion of response actions, no odors or other nuisance conditions have been identified at the Site. No other public welfare impacts on the surrounding community have been identified related to the release at the Site, based on compliance with the criteria set forth in 310 CMR 40.0994(4).

In addition, the maximum detected soil concentrations were compared to applicable UCLs in ***Table 6***, and no UCL exceedances were identified.

As such a Condition of No Significant Risk to Public Welfare exists at the Site.

5.10 — Risk to the Environment

Soil impacts at the Site are limited to petroleum-related compounds. The absence of these compounds in groundwater at the Site indicate that the compounds are adsorbed to the soil and are not leaching actively and therefore do not pose an exposure risk to aquatic receptors. The current undeveloped state of the Site and Property does not restrict exposure to Site soils by terrestrial organisms (except under the south-bounding municipal sidewalk and as provided by the fencing bordering the Property). Site vegetation consists of volunteer growth of weeds and grasses, which is controlled by periodic cutting by lawn contractors employed by the Property Owner. The Property formerly was fully developed with buildings and pavement prior to demolition activities in 2009; and proposed re-development involves nearly complete coverage with buildings and/or associated pavement. No habitat (wetlands, protected open space, or NHESP habitat) exists at or adjacent to the Property.

The only detected CoC that may be bioaccumulated is lead. Lead concentrations in soil at the Site were identified at 124 mg/Kg, less than the Method 1 Soil S-1 Risk Criteria and within the general range of the Property-wide average background lead concentration of 95 mg/Kg established in the May 1, 2010, Phase II Comprehensive Site Assessment relative to RTN 3-23606 that encompasses the entire Property including this Site (see ***Table 6***).

Accordingly, a Condition of No Significant Risk to the Environmental is demonstrated.

5.11 — Comparison of EPCs to Estimated Background

The MCP defines background as: "those levels of oil and hazardous material that would exist in the absence of the disposal site of concern which are either:

a. Ubiquitous and consistently present in the environment at and in the vicinity of the disposal site of concern; and attributable to geologic or ecological conditions, or atmospheric deposition of industrial process or engine emissions;

b. Attributable to coal ash or wood ash associated with fill material;

c. Releases to groundwater from a public water supply system; or

d. Petroleum residues that are incidental to the normal operation of motor vehicles."

At the Property, near-surface soils consist of urban fill impacted by past development/demolition activities and by incorporation of coal and ash from previous fuel sources used at the Property. Because development of the Property has consistently been with increasingly large structures, each stage of development more likely generated excess soil for redistribution at the Property or for off-site disposal as opposed to importing fill from off-site sources. As documented in the May 1, 2010, Phase II Comprehensive Site Assessment relative to RTN 3-23606 (which encompasses the entire Property including this Site), laboratory analysis of fill soils at the Property confirmed the common presence of coal and ash and its association with PAHs and metals (see ***Appendix E***). Although not directly related, coal and ash also generally correlated with petroleum hydrocarbon concentrations. Average contaminant concentrations in soils from areas of the Property not impacted by known or suspected releases are summarized in ***Table 6***.

Concentrations of PAHs and metals identified at the Site generally are consistent with those in fill from unimpacted areas of the Property.

6.0 — FEASIBILITY OF APPROACHING OR ACHIEVING BACKGROUND

In accordance with 310 CMR 40.0860, an evaluation of the feasibility of reducing the concentrations of oil and hazardous material in the environment at a disposal site or a portion of the disposal site to levels that achieve or approach background shall be conducted in all cases where a Permanent Solution is selected as the Comprehensive Remedial Action alternative, unless the Permanent Solution selected is designated to achieve background and a Class A-1 RAO, pursuant to 310 CMR 40.1000. Because this Report documents a Class A-2 RAO, a feasibility of reducing concentrations of oil and hazardous materials to achieve or approach background levels has been conducted in accordance with 310 CMR 40.1020 and MassDEP Policy WSC-04-160 (*Conducting Feasibility Evaluations Under the MCP*).

As discussed in ***Section 5.11***, concentrations of PAHs and metals in fill-horizon soils at the Site generally meet or approach concentrations in fill from unimpacted area of the Property. These concentrations reflect, in part, contributions from coal and ash widely present in the fill. Concentrations of petroleum hydrocarbons, however, cannot be attributed to such conditions qualifying as a background condition. In the absence of anthropogenic contributions, petroleum hydrocarbon concentrations in glacial soils of Massachusetts are expected to be less than laboratory detection limits.

According to MassDEP Policy #WSC-04-160, it is the MassDEP's position that achieving or approaching background can be deemed infeasible for degradable/nonpersistent contaminants regardless of media classification, except for small quantities of petroleum-contaminated soil considered accessible for remediation. Most petroleum compounds are considered to be degradable/nonpersistent contaminants, as stipulated in Section 4.9 of MassDEP Policy #WSC-02-

411 (*Implementation of the MADEP VPH/EPH Approach*). Excavation of petroleum-impacted soil is considered to be categorically feasible for petroleum-impacted soil if the remaining impact is less than or equal to 20 cubic yards, is located less than three feet below grade, is not covered by pavement or a permanent structure, is not located within a sensitive environment, and is not located in an area where removal activities will substantially interrupt public service or threaten public safety. The Site is not located within a sensitive environment and is not located in an area where removal activities would substantially interrupt public service or threaten public safety, except beneath the public sidewalk. Further evaluation of the feasiblity of approaching background requires assessment of the estimated volume of remaining impacted soil, its depth below grade, and its cover by permanent structures.

Impacted soil at the Site extends from ground surface to an average depth eight (8) feet below grade but above the water table, consistent with the absence of impact to groundwater. Soil with detectable concentrations of petroleum hydrocarbons is present in the margins of the original excavations, except the west sidewall of the southeast gasoline tankbed. Because detectable concentrations of petroleum hydrocarbons were identified in the "island" of soil between the two tankbeds in which monitoring well AE-103 was installed, the area of unimpacted soil on the west side of the southeast tankbed is limited in extent. Based on Site boundaries identified as 36 feet east/west, 15 feet north/south and 8 feet deep, the Site comprises a volume of 160 cubic yards. Excavation by Sanborn Head & Associates removed 14.5 tons (approximately 9.7 cubic yards without correction for fluff factor) of impacted soil and two 1,000-gallon tanks (corresponding to 10 cubic yards). Accordingly, it is estimated that 140 cubic yards of soil with detectable concentrations of petroleum hydrocarbons remain at the Site. Clean Properties also notes that detectable petroleum hydrocarbons also have been identified widely in the fill horizon of the Property, so even the removal of that quantity of soil might not achieve "background." Based on depth and volume considerations, Clean Properties has determined that the Site qualifies for a categorical determination that is infeasible to achieve or approach background for degradable/nonpersistent petroleum hydrocarbons, pursuant to MassDEP Policy #WSC-04-160.

The area of soil represented by soil sample "Southwest Gas Tank South Wall" is located beneath the municipal sidewalk, which was recently relaid as part of improvements to Somerville Avenue. Accordingly, Clean Properties also determined that the associated soil volume is located beneath a permanent structure and similarly qualifies for a categorical determination that it is infeasible to achieve or approach background for degradable/nonpersistent petroleum hydrocarbons, pursuant to MassDEP Policy #WSC-04-160.

7.0 — DATA USABILITY ASSESSMENT

The representativeness and usability of the data was evaluated in accordance with 310 CMR 40.1056(2)(k) and MassDEP Policy #WSC-07-350 and is discussed below.

7.1 — Data Representativeness

The Data Representativeness is a demonstration that spatial and temporal data sets are adequate to support the RAO. Each of the Data Representativeness elements identified in MassDEP Policy #WSC-07-350 is evaluated following.

Response actions from discovery through December 2009 were performed by Sanborn Head & Associates under the guidance of LSP Duncan Woods. Response actions from January 2010 through March 2011 were performed by Action Environmental Boston under the guidance of LSP Glenn A. Carlson. Since April 2011, response actions have been performed by Clean Properties under the guidance of LSP Marcia J. Berger. Principal Hydrogeologist Robert Houghton was Project Manager for both Action Environmental Boston and Clean Properties, providing a degree of project continuity since January 2010.

Laboratory analyses contracted by Rizzo Associates for encompassing site RTN 3-23606 and laboratory analyses contracted by Sanborn Head & Associates were performed by Alpha Laboratories of Westfield, Massachusetts. Laboratory analyses contracted by Action Environmental Boston were performed by New England Testing (NET) Laboratories of North Providence, Rhode Island. Both laboratories have met the requirements for drinking-water testing certifications by the MassDEP. No distinct biases were identified between laboratories for the analyses of the CoCs.

7.1.1 — Selection of CoCs Based on Conceptual Site Model

Based on the Conceptual Site Model presented in ***Section 4.3***, the release at the Site of RTN 3-28548 was of virgin gasoline, with detected VPH fractions and Target VOCs included as CoCs in soil for Risk Assessment purposes. Because encompassing Site RTN 3-23606 included metals and PAHs associated ash and coal and with petroleum hydrocarbons in the urban fill of the Property, detected metals, PAHs, and TPH/EPH fractions also were included as CoCs in soil for Risk Assessment purposes. Disposal characterization samples included testing additionally for VOCs by USEPA Method 8260, PCBs, SVOCs by USEPA Method 8270, Pesticides, Total Cyanide, and RCRA hazardous characteristics of Ignitability, Reactivity, and Corrosivity — which identified no additional detectable constituents warranting consideration as CoCs in soil. Based on the totality of this testing, no conditions associated with historic Site uses, hydrogeologic setting, and field observations warrant further evaluation for potential CoCs.

No petroleum products were detected in the one monitoring well at the Site during any of four quarterly groundwater sampling events, using modified USEPA low-flow sampling protocols. The monitoring well was located in the center of the former underground gasoline storage tank beds comprising the Site. Because liquid contaminants like gasoline tend to move predominantly vertically in the unsaturated zone and because no confining strata were identified at the Site that could alter that migration trend, that monitoring well was considered to be most appropriate for evaluating groundwater at the Site. The multiple groundwater samples demonstrate that seasonal fluctuations did not affect groundwater quality. In the absence of detectable petroleum concentrations in the groundwater samples at the Site, the data indicates that groundwater is not a media of concern at the Site and no groundwater CoCs are applicable.

7.1.2 — Use of Field Screening Data and Sampling Rationale

The Data Representativeness Evaluation includes verification that sample locations (both areally and depth-wise) are appropriate to support the conclusions of the RAO. Sanborn Head & Associates followed sampling guidance set forth in MassDEP Policy #WSC-96-402 (*Commonwealth of Massachusetts Underground Storage Tank Closure Assessment Manual*). As documented in the Sanborn Head & Associates September 3, 2009, IRA Plan, excavated impacted soil from around the tanks, the horizontal and vertical extent of excavation being guided by field screening with a photoionization detector (PID) in accordance with the MassDEP Jar Headspace Method. Once measured PID levels reached or approached background PID levels, Sanborn Head & Associates considered impacted soil to have been removed and ceased excavation.

To verify that excavation boundaries had removed soil impacted by the gasoline release, Sanborn Head & Associates screened each sidewall and floors with a PID. Sanborn Head & Associates collected discrete samples from the sidewalls of each UST excavation and from the floor of each UST excavation, selecting sampling locations based on the highest PID readings for each sidewall or floor. Following the sampling, the excavation was backfilled with unimpacted formation materials for safety reasons.

When disposal characterization of the drummed unpumpable tank contents suggested the presence of PCBs, Action Environmental Boston installed borings along the former excavation margins using a push-probe drill rig. Soil samples were collected from depths and locations corresponding to those collected by Sanborn Head & Associates as closely as could be estimated in the field. Sidewall samples and floor samples were composited into separate samples for laboratory analysis, and no detectable PCB concentrations were identified. Subsequent wipe sample testing of the interior of the PPE drum by General Chemical indicated the presence of PCBs, indicating that the used drums provided by the contractor (Tufts, Inc.) may previously have contained PCB-bearing wastes. Accordingly, the PCBs were not attributed to the gasoline release or the Site.

Additional borings and monitoring wells were available at the Property outside the Site area to help define conditions absent of the release.

In the opinion of Clean Properties, this sampling plan was sufficient to delineate Site boundaries, identify background, calculate Exposure Point Concentrations, identify Hot Spots (if present), identify exposure pathways and receptors, and demonstrate source elimination or control.

All hand soil sampling was performed using stainless-steel trowels or coring devices, with soil transferred directly to sample bottles. For analysis of VPH and VOCs, samples were weighed into pre-weighed 40-milliliter laboratory vials containing methanol and sealed with Teflon septum caps. Vials contained sufficient methanol to cover the soil, pursuant to MassDEP Policy #WSC-99-415 and MassDEP Policy #WSC-02-411. For analysis of EPH, metals, and other non-volatile contaminants, samples were transferred directly into eight-ounce amber-colored glass bottles and sealed with Teflon-lined caps. All sample bottles were placed immediately into coolers and maintained on ice until delivery to the analyzing laboratory.

Sampling equipment was decontaminated between uses with sequential rinses of low-phosphate detergent (Alconox), distilled water, and methanol. No evidence of sample cross-contamination was identified in Clean Properties' review of the analytical data.

7.1.3 — Completeness

Data was evaluated for completeness, and no gaps in the above sampling plan were identified. No critical samples were determined to be missing. No data obtained is considered to be unrepresentative of the Site, excluding PCB testing of drummed unpumpable tank contents as discussed in ***Section 7.1.2***.

7.1.4 — Inconsistency and Uncertainty

The Conceptual Site Model is based on release of gasoline from two former underground storage tanks that were removed in June 2009. In addition to gasoline-indicator VPH and Target VOCs, analyses identified EPH and Target PAHs. The EPH could indicate undocumented use of one or both of the tanks for diesel fuel at some time in the historic use of the tanks. Because analyses and evaluations encompassed both petroleum hydrocarbon groups, this inconsistency between data and historic records is not considered to affect the Risk Characterization and its conclusions.

Similarly, the identification of PCBs in the drummed unpumpable tank contents is not considered to indicate a contaminant condition not evaluated by the Risk Characterization. Disposal characterization of the soil taken to Aggregate Recycling Corporation included PCB analysis and identified no detectable concentrations. Similarly liquid tank contents reportedly were screened for

chlorinated compounds when received by Global Companies, with no indication of PCBs identified. Wipe testing of the interior of the drum containing used personal-protection equipment by Cycle Chem indicated the presence of PCBs not identified on the equipment, indicating that the used drums provided by the excavation contractor (Tufts Corp.) were contaminated with PCBs from previous uses; and the PCBs were unrelated to the Site release. Accordingly, PCBs were not identified as a Site CoC. Supplemental testing of soil from excavation walls also identified no detectable PCBs.

No other elements of inconsistency or uncertainty were identified at the Site.

7.2 — Evaluation of CAM Compliance

Clean Properties evaluated laboratory analytical reports for consistency with the Compendium of Analytical Methods (CAM). Compliance conditions are summarized in ***Table 7***.

Analytical reports issued by Alpha Analytical Laboratory in 2004 and 2005 used analytical methods consistent with those adopted by CAM, but the reports lack Laboratory Case Narratives. Accordingly, those reports are considered to be "CAM Non-Compliant" analytical data. Remaining analytical reports are considered to document "CAM Compliant" analytical data.

In its review of the "CAM Non-Compliant" analytical data, Clean Properties identified no quality-control conditions affecting overall accuracy, precision, and/or sensitivity. Laboratory reports documented use of CAM-consistent analytical methods, and all quality-control data were determined for fall within accepted ranges. Accordingly, the data were considered to be appropriate to support the RAO.

In its review of "CAM Compliant analytical data, Clean Properties noted the specific CAM variances identified in ***Table 7***:

> Analysis by USEPA Method 8260B of Laboratory Sample L0211837-01 (RIZ-2-GW) documented in Alpha Analytical Report L0211837 was identified in the Summary as being above and/or below the acceptance criteria required for the method; however, the actual analytical data pages identified no such exceedance of the accepted range. Therefore, this data was considered to be CAM Compliant and valid. RIZ-2-GW is not located within the Site, serving as an indicator of nearby conditions on the Property.
>
> Analysis by MassDEP VPH Method of Laboratory Samples L0907709-01 through -10 (SE Gas Tank and SW Gas Tank soil closure samples) were determined to contain soil volumes less than would achieve the recommended 1:1 methanol:soil ratio. This deficiency potentially could result in an underestimation of the concentration of VPH fractions and targets. Because none of the determined concentrations in these samples approached Method

1 Risk Criteria, this deficiency is not considered to have affected significantly RAO conclusions.

Analysis by MassDEP EPH Method of Laboratory Samples L0907709-01 through -11 (SE Gas Tank and SW Gas Tank soil closure samples) were determined to exceed the reproducibility acceptance criteria for Nonane (surrogate for C_9); however, individual recoveries for all other surrogates and duplicates were within acceptance criteria. Because this exceedance would result in a positive bias and because other criteria were consistent with acceptance criteria, this deficiency is not considered to have affected significantly RAO conclusions.

Analysis by MassDEP VPH Method of Laboratory Sample L0907709-06 (SW Gas Tank 2 South Wall) resulted in elevated detection limits due to dilution required by the elevated concentrations of target samples in the sample. Because the RAO was based on maximum EPCs and because this condition would result in a positive bias, this deficiency is not considered to have affected significantly RAO conclusions.

Analysis of waste characterization sample L0907777-02 (Southern Gas Tank Solids) by analytical methods set forth in MassDEP Policy #COMM-97-001 was determined to result in surrogate recoveries with a potentially high bias for bromomethane and a potentially low bias for dichlorofluoromethane, which are considered to be "difficult" analytes by the specified analytical protocols. Because these samples were used to characterize material removed from the Site, this deficiency is not considered to have affected significantly RAO conclusions.

All other data supporting the RAO is identified as reported appropriately and supported by quality control data consistent with CAM.

8.0 — LSP OPINION AND RAO STATEMENT

In the opinion of Clean Properties, this Report meets the requirements for a RAO Statement set forth in 310 CMR 40.1000.

Based on a Method 1 Risk Assessment, a Condition of No Significant Risk has been identified for the Site (RTN 3-28548) and for that portion of the Property subject to RTN 3-23606 that lies within the area of RTN 3-238548. Because soil removal reduced contaminant concentrations below applicable Method 1 Risk Criteria but not to background levels, and because Activity and Use Limitations (AULs) are not required to achieve a Condition of No Significant Risk at the Site, a Class A-2 Response Action Outcome (RAO) has been obtained at the Site of RTN 3-28548; and a

Class A-2 Partial RAO has been obtained at that portion of RTN 3-23606 (the Property) lying within the boundaries of Site RTN 3-238548.

All activities identified in this RAO Statement also were documented in previous MassDEP submittals, certified therein by other LSPs as having been performed in accordance with the MCP.

The seal and signature of the LSP responsible for this RAO Statement, Marcia J. Berger (LSP #4667), are presented through the electronic submittal of accompanying RAO Transmittal Form (BWSC-104).

If you have any questions regarding this submittal, please feel free to contact us anytime at 978-443-6622.

Very truly yours,
CLEAN PROPERTIES, INC.

Robert Houghton
Principal Hydrogeologist

Marcia J. Berger, PE, LSP
President

cc: Mark Coppola, World 115 Nominee Trust

TABLES

CLEAN PROPERTIES, INC., 111 Boston Post Road, Suite 211, Sudbury, MA 01776
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TABLE 1. — CONCENTRATIONS OF DETECTED CONTAMINANTS IN SOIL AT 515 SOMERVILLE AVENUE, SOMERVILLE, MASSACHUSETTS
Within RTN 3-28548

DETECTED CONTAMINANTS	CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM (mg/Kg), approximately Parts per Million (ppm)								
	AE-103	SEGT-SWall	SEGT-EWall	SEGT-WWall	SEGT-NWall	SEGT-Base	SWGT-SWall	MCP METHOD 1 RISK CRITERIA	
	0-3'							S-1 GW-2/3	S-2 GW-2/3
	AEB (2010)	SHA (2009)	SHA (2009)	SHA (2009)	SHA (2009)	SHA (2009)	SHA (2009)		
	02/18/2010	06/10/2009	06/10/2009	06/10/2009	06/10/2009	06/10/2009	06/10/2009		
Total Petroleum Hydrocarbons (TPH)									
TPH	NT	**50.0c**	**46.3c**	**20.5c**	**39.1c**	**45.1c**	**782c**	1,000/1,000	3,000/3,000
Volatile Petroleum Hydrocarbon (VPH) Fractions									
C5-C8 Aliphatics	NT	<8.05	<5.73	<5.53	<4.92	<5.24	**357**	100/100	500/500
C9-C12 Aliphatics	NT	<8.05	<5.73	<5.53	<4.92	<5.24	**232**	1,000/1,000	3,000/3,000
C9-C10 Aromatics	NT	<8.05	<5.73	<5.53	<4.92	<5.24	**170**	100/100	500/500
Volatile Organic Compounds (VOCs) (USEPA Method 8260)									
Benzene	NT	<0.322	<0.229	<0.221	<0.197	<0.210	<2.09	30/30	200/200
Toluene	NT	<0.322	<0.229	<0.221	<0.197	<0.210	**5.91**	500/500	1,000/1,000
Tetrachloroethene	NT	NT	NT	NT	NT	NT	NT	10/30	10/200
Ethylbenzene	NT	<0.322	<0.229	<0.221	<0.197	<0.210	<2.09	500/500	1,000/1,000
m+p-Xylenes	NT	<0.322	<0.229	<0.221	<0.197	<0.210	**17.8**	300/500	300/1,000
o-Xylene	NT	<0.322	<0.229	<0.221	<0.197	<0.210	**7.58**	300/500	300/1,000
Total Xylenes	NT	<0.644	<0.458	<0.442	<0.394	<0.420	**25.4**	300/500	300/1,000
Isopropylbenzene	NT	NT	NT	NT	NT	NT	NT	NE (1,000)	NE (1,000)
n-Propylbenzene	NT	NT	NT	NT	NT	NT	NT	NE (100)	NE (100)
tert-Butylbenzene	NT	NT	NT	NT	NT	NT	NT	NE (100)	NE (100)
1,2,4-Trimethylbenzene	NT	NT	NT	NT	NT	NT	NT	NE (1,000)	NE (1,000)
sec-Butylbenzene	NT	NT	NT	NT	NT	NT	NT	NE	NE

DETECTED CONTAMINANTS	CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM (mg/Kg), approximately Parts per Million (ppm)								
	AE-103	SEGT-SWall	SEGT-EWall	SEGT-WWall	SEGT-NWall	SEGT-Base	SWGT-SWall	MCP METHOD 1 RISK CRITERIA	
	0-3'							S-1 GW-2/3	S-2 GW-2/3
	AEB (2010)	SHA (2009)	SHA (2009)	SHA (2009)	SHA (2009)	SHA (2009)	SHA (2009)		
	02/18/2010	06/10/2009	06/10/2009	06/10/2009	06/10/2009	06/10/2009	06/10/2009		
p-Isopropyltoluene	NT	NT	NT	NT	NT	NT	NT	NE	NE
n-Butylbenzene	NT	NT	NT	NT	NT	NT	NT	NE	NE
Naphthalene	NT	<1.61	<1.14	<1.10	<0.984	<1.05	<10.4	40/500	40/1,000
Extractable Petroleum Hydrocarbon (EPH) Fractions									
C9-C18 Aliphatics	<12.0	<8.13	<8.44	<8.13	<7.75	<8.13	<7.58	1,000/1,000	3,000/3,000
C19-C36 Aliphatics	<12.0	**12.9**	**15.0**	<8.13	**11.4**	**16.5**	**8.48**	3,000/3,000	5,000/5,000
C11-C22 Aromatics	**13.4**	**21.0**	**18.5**	<8.13	**16.4**	**16.7**	**11.2**	1,000/1,000	3,000/3,000
Polynuclear Aromatic Hydrocarbons (PAHs)									
Naphthalene	<0.30	<0.406	<0.422	<0.406	<0.388	<4.06	<0.379	40/500	40/1,000
2-Methylnaphthalene	<0.30	<0.406	<0.422	<0.406	<0.388	<4.06	<0.379	80/300	80/500
Phenanthrene	<0.30	<0.406	<0.422	<0.406	<0.388	<4.06	<0.379	500/500	1,000/1,000
Acenaphthylene	<0.30	<0.406	<0.422	<0.406	<0.388	<4.06	<0.379	600/10	600/10
Acenaphthene	<0.30	<0.406	<0.422	<0.406	<0.388	<4.06	<0.379	1,000/1,000	3,000/3,000
Fluorene	<0.30	<0.406	<0.422	<0.406	<0.388	<4.06	<0.379	1,000/1,000	3,000/3,000
Anthracene	<0.30	<0.406	<0.422	<0.406	<0.388	<4.06	<0.379	1,000/1,000	3,000/3,000
Fluoranthene	**0.50**	**0.422**	<0.422	<0.406	<0.388	<4.06	<0.379	1,000/1,000	3,000/3,000
Pyrene	**0.60**	<0.406	<0.422	<0.406	<0.388	<4.06	<0.379	1,000/1,000	3,000/3,000
Benzo(a)anthracene	**0.30**	<0.406	<0.422	<0.406	<0.388	<4.06	<0.379	7/7	40/40
Chrysene	**0.40**	<0.406	<0.422	<0.406	<0.388	<4.06	<0.379	70/70	400/400
Benzo(b)fluoranthene	**0.30**	<0.406	<0.422	<0.406	<0.388	<4.06	<0.379	7/7	40/40
Benzo(k)fluoranthene	**0.30**	<0.406	<0.422	<0.406	<0.388	<4.06	<0.379	70/70	400/400

DETECTED CONTAMINANTS	CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM (mg/Kg), approximately Parts per Million (ppm)								
	AE-103	SEGT-SWall	SEGT-EWall	SEGT-WWall	SEGT-NWall	SEGT-Base	SWGT-SWall	MCP METHOD 1 RISK CRITERIA	
	0-3'							S-1 GW-2/3	S-2 GW-2/3
	AEB (2010)	SHA (2009)	SHA (2009)	SHA (2009)	SHA (2009)	SHA (2009)	SHA (2009)		
	02/18/2010	06/10/2009	06/10/2009	06/10/2009	06/10/2009	06/10/2009	06/10/2009		
Benzo(b/k)fluroanthene	**0.60**	<0.812	<0.422	<0.406	<0.388	<4.06	<0.379	NE	NE
Benzo(a)pyrene	**0.30**	<0.406	<0.422	<0.406	<0.388	<4.06	<0.379	2/2	4/4
Indeno(1,2,3-cd)pyrene	<0.30	<0.406	<0.422	<0.406	<0.388	<4.06	<0.379	7/7	40/40
Dibenzo(a,h)anthracene	<0.30	<0.406	<0.422	<0.406	<0.388	<4.06	<0.379	0.7/0.7	4/4
Benzo(g,h,i)perylene	<0.30	**1.20**	**0.862**	**0.889**	**0.758**	**1.01**	<0.379	1,000/1,000	3,000/3,000
Polychlorinated Biphenyls (PCBs)									
PCBs	NT	NT	NT	NT	NT	NT	NT	2/2	3/3
Metals									
Arsenic	**2.42**	NT	NT	NT	NT	NT	NT	20/20	20/20
Barium	**41.7**	NT	NT	NT	NT	NT	NT	1,000/1,000	3,000/3,000
Chromium	**8.13**	NT	NT	NT	NT	NT	NT	30/30	200/200
Copper	NT	NT	NT	NT	NT	NT	NT	NE (1,000)	NE (1,000)
Lead	**124**	NT	NT	NT	NT	NT	NT	300/300	300/300
Mercury	**0.204**	NT	NT	NT	NT	NT	NT	20/20	30/30
Nickel	NT	NT	NT	NT	NT	NT	NT	20/20	700/700
Zinc	NT	NT	NT	NT	NT	NT	NT	2,500/2,500	3,000/3,000

"Detected Contaminants" include contaminants identified associated with any site at the Property.
NT = Not Tested
ND = Not Detected above unspecified analytical method lower detection limit
NE = Not Established, number in parentheses is MCP Soil S-1 Reportable Concentration
c (as in 50.0c) = TPH concentration calculated from VPH + EPH
Concentrations shown in **BOLD** were identified above the analytical method lower detection limit
Concentrations shown in **RED** exceed applicable Method 1 Soil Risk Criteria
AEB = Action Environmental Boston
SHA = Sanborn Head & Associates

CONCENTRATIONS OF DETECTED CONTAMINANTS IN SOIL AT 515 SOMERVILLE AVENUE, SOMERVILLE, MASSACHUSETTS
RTNs 3-23606, 3-28545, 3-28546, and 3-28548

DETECTED CONTAMINANTS	CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM (mg/Kg), approximately Parts per Million (ppm)								
	SWGT-NWall	SWGT-EWall	SWGT-WWall	SWGT-Base	WGT-Base	CSW-1	EF-2	MCP METHOD 1 RISK CRITERIA	
						Sidewalls	Floor	S-1 GW-2/3	S-2 GW-2/3
	SHA (2009)	SHA (2009)	SHA (2009)	SHA (2009)	SHA (2009)	AEB	AEB		
	06/10/2009	06/10/2009	06/10/2009	06/10/2009	06/10/2009	01/25/2011	01/25/2011		
Total Petroleum Hydrocarbons (TPH)									
TPH	**144c**	**49.6c**	**110c**	**20.7c**	**17.5c**	NT	NT	1,000/1,000	3,000/3,000
Volatile Petroleum Hydrocarbon (VPH) Fractions									
C5-C8 Aliphatics	<6.12	<5.29	**26.9**	<6.44	<3.08	NT	NT	100/100	500/500
C9-C12 Aliphatics	**8.16**	<5.29	**15.4**	<6.44	**3.59**	NT	NT	1,000/1,000	3,000/3,000
C9-C10 Aromatics	<6.12	<5.29	**23.9**	<6.44	<3.08	NT	NT	100/100	500/500
Volatile Organic Compounds (VOCs) (USEPA Method 8260)									
Benzene	<0.245	<0.212	**0.790**	<0.258	<0.123	NT	NT	30/30	200/200
Toluene	**0.307**	<0.212	**3.01**	<0.258	<0.123	NT	NT	500/500	1,000/1,000
Tetrachloroethene	NT	NT	NT	NT	NT	NT	NT	10/30	10/200
Ethylbenzene	<0.245	<0.212	**1.61**	<0.258	<0.123	NT	NT	500/500	1,000/1,000
m+p-Xylenes	**0.618**	**0.284**	**10.5**	<0.258	**0.124**	NT	NT	300/500	300/1,000
o-Xylene	<0.245	<0.212	**3.53**	<0.258	<0.123	NT	NT	300/500	300/1,000
Total Xylenes	**0.741**	**0.390**	**14.0**	<0.516	**0.186**	NT	NT	300/500	300/1,000
Isopropylbenzene	NT	NT	NT	NT	NT	NT	NT	NE (1,000)	NE (1,000)
n-Propylbenzene	NT	NT	NT	NT	NT	NT	NT	NE (100)	NE (100)
tert-Butylbenzene	NT	NT	NT	NT	NT	NT	NT	NE (100)	NE (100)

DETECTED CONTAMINANTS	CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM (mg/Kg), approximately Parts per Million (ppm)								
	SWGT-NWall	SWGT-EWall	SWGT-WWall	SWGT-Base	WGT-Base	CSW-1	EF-2	MCP METHOD 1 RISK CRITERIA	
						Sidewalls	Floor	S-1 GW-2/3	S-2 GW-2/3
	SHA (2009)	SHA (2009)	SHA (2009)	SHA (2009)	SHA (2009)	AEB	AEB		
	06/10/2009	06/10/2009	06/10/2009	06/10/2009	06/10/2009	01/25/2011	01/25/2011		
1,2,4-Trimethylbenzene	NT	NT	NT	NT	NT	NT	NT	NE (1,000)	NE (1,000)
sec-Butylbenzene	NT	NT	NT	NT	NT	NT	NT	NE	NE
p-Isopropyltoluene	NT	NT	NT	NT	NT	NT	NT	NE	NE
n-Butylbenzene	NT	NT	NT	NT	NT	NT	NT	NE	NE
Naphthalene	<1.22	<1.06	**1.74**	<1.29	<0.616	NT	NT	40/500	40/1,000
Extractable Petroleum Hydrocarbon (EPH) Fractions									
C9-C18 Aliphatics	**11.8**	<7.84	<7.94	<7.33	<7.25	NT	NT	1,000/1,000	3,000/3,000
C19-C36 Aliphatics	**54.8**	**12.5**	**21.4**	<7.33	<7.25	NT	NT	3,000/3,000	5,000/5,000
C11-C22 Aromatics	**63.6**	**25.2**	**18.6**	<7.33	<7.25	NT	NT	1,000/1,000	3,000/3,000
Polynuclear Aromatic Hydrocarbons (PAHs)									
Naphthalene	<0.402	<0.392	<0.397	<0.366	<0.362	NT	NT	40/500	40/1,000
2-Methylnaphthalene	<0.402	<0.392	<0.397	<0.366	<0.362	NT	NT	80/300	80/500
Phenanthrene	**0.512**	**1.66**	<0.397	<0.366	<0.362	NT	NT	500/500	1,000/1,000
Acenaphthylene	<0.402	<0.392	<0.397	<0.366	<0.362	NT	NT	600/10	600/10
Acenaphthene	<0.402	<0.392	<0.397	<0.366	<0.362	NT	NT	1,000/1,000	3,000/3,000
Fluorene	<0.402	<0.392	<0.397	<0.366	<0.362	NT	NT	1,000/1,000	3,000/3,000
Anthracene	<0.402	<0.392	<0.397	<0.366	<0.362	NT	NT	1,000/1,000	3,000/3,000
Fluoranthene	**1.01**	**1.74**	<0.397	<0.366	<0.362	NT	NT	1,000/1,000	3,000/3,000
Pyrene	**0.839**	**1.48**	<0.397	<0.366	<0.362	NT	NT	1,000/1,000	3,000/3,000
Benzo(a)anthracene	**0.611**	**0.698**	<0.397	<0.366	<0.362	NT	NT	7/7	40/40
Chrysene	**0.950**	**0.899**	<0.397	<0.366	<0.362	NT	NT	70/70	400/400

DETECTED CONTAMINANTS	CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM (mg/Kg), approximately Parts per Million (ppm)								
	SWGT-NWall	SWGT-EWall	SWGT-WWall	SWGT-Base	WGT-Base	CSW-1	EF-2	MCP METHOD 1 RISK CRITERIA	
						Sidewalls	Floor	S-1 GW-2/3	S-2 GW-2/3
	SHA (2009)	SHA (2009)	SHA (2009)	SHA (2009)	SHA (2009)	AEB	AEB		
	06/10/2009	06/10/2009	06/10/2009	06/10/2009	06/10/2009	01/25/2011	01/25/2011		
Benzo(b)fluoranthene	**0.758**	**0.739**	<0.397	<0.366	<0.362	NT	NT	7/7	40/40
Benzo(k)fluoranthene	**0.585**	**0.614**	<0.397	<0.366	<0.362	NT	NT	70/70	400/400
Benzo(b/k)fluroanthene	**1.343**	**1.353**	<0.397	<0.366	<0.362	NT	NT	NE	NE
Benzo(a)pyrene	**0.599**	**0.675**	<0.397	<0.366	<0.362	NT	NT	2/2	4/4
Indeno(1,2,3-cd)pyrene	**0.532**	**0.501**	<0.397	<0.366	<0.362	NT	NT	7/7	40/40
Dibenzo(a,h)anthracene	<0.402	<0.392	<0.397	<0.366	<0.362	NT	NT	0.7/0.7	4/4
Benzo(g,h,i)perylene	**1.02**	**1.43**	**0.875**	<0.366	<0.362	NT	NT	1,000/1,000	3,000/3,000
Polychlorinated Biphenyls (PCBs)									
PCBs	NT	NT	NT	NT	NT	<0.1	<0.1	2/2	3/3
Metals									
Arsenic	NT	NT	NT	NT	NT	NT	NT	20/20	20/20
Barium	NT	NT	NT	NT	NT	NT	NT	1,000/1,000	3,000/3,000
Chromium	NT	NT	NT	NT	NT	NT	NT	30/30	200/200
Copper	NT	NT	NT	NT	NT	NT	NT	NE (1,000)	NE (1,000)
Lead	NT	NT	NT	NT	NT	NT	NT	300/300	300/300
Mercury	NT	NT	NT	NT	NT	NT	NT	20/20	30/30
Nickel	NT	NT	NT	NT	NT	NT	NT	20/20	700/700
Zinc	NT	NT	NT	NT	NT	NT	NT	2,500/2,500	3,000/3,000

NT = Not Tested
ND = Not Detected above unspecified analytical method lower detection limit
NE = Not Established, number in parentheses is MCP Soil S-1 Reportable Concentration
c (as in 239c) = TPH concentration calculated from VPH + EPH
Concentrations shown in **BOLD** were identified above the analytical method lower detection limit
Concentrations shown in **RED** exceed applicable Method 1 Soil Risk Criteria

TABLE 2. — CONCENTRATIONS OF DETECTED CONTAMINANTS IN SOIL AT 515 SOMERVILLE AVENUE, SOMERVILLE, MASSACHUSETTS at Sampling Locations Bordering RTN 3-28548.

DETECTED CONTAMINANTS	CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM (mg/Kg), approximately Parts per Million (ppm)				
	GP-4	GP-5	SH-7	MCP METHOD 1 RISK CRITERIA	
	8-12'	4-8'	3-4'	S-1 GW-2/3	S-2 GW-2/3
	Rizzo (2005)	Rizzo (2005)	Rizzo (2005)		
	11/13/2002	11/13/2002	09/24/2003		
Total Petroleum Hydrocarbons (TPH)					
TPH	20.5c	19.2c	20.7c	1,000/1,000	3,000/3,000
Volatile Petroleum Hydrocarbon (VPH) Fractions					
C5-C8 Aliphatics	<2.76	<1.91	<2.73	100/100	500/500
C9-C12 Aliphatics	<2.76	<1.91	<2.73	1,000/1,000	3,000/3,000
C9-C10 Aromatics	<2.76	<1.91	<2.73	100/100	500/500
Volatile Organic Compounds (VOCs) (USEPA Method 8260)					
Benzene	<0.069	<0.048	<0.137	30/30	200/200
Toluene	<0.100	<0.072	<0.137	500/500	1,000/1,000
Tetrachloroethene	<0.069	<0.048	<0.00097	10/30	10/200
Ethylbenzene	<0.069	<0.048	<0.137	500/500	1,000/1,000
m+p-Xylenes	<0.069	<0.048	<0.137	300/500	300/1,000
o-Xylene	<0.069	<0.048	<0.137	300/500	300/1,000
Total Xylenes	<0.138	<0.096	<0.274	300/500	300/1,000
Isopropylbenzene	<0.069	<0.048	NT	NE (1,000)	NE (1,000)
n-Propylbenzene	<0.069	<0.048	NT	NE (100)	NE (100)
tert-Butylbenzene	<0.340	<0.240	NT	NE (100)	NE (100)
1,2,4-Trimethylbenzene	<0.340	<0.240	NT	NE (1,000)	NE (1,000)
sec-Butylbenzene	<0.069	<0.048	NT	NE	NE
p-Isopropyltoluene	<0.069	<0.048	NT	NE	NE
n-Butylbenzene	<0.069	<0.048	NT	NE	NE

DETECTED CONTAMINANTS	CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM (mg/Kg), approximately Parts per Million (ppm)				
	GP-4	GP-5	SH-7	MCP METHOD 1 RISK CRITERIA	
	8-12'	4-8'	3-4'	S-1 GW-2/3	S-2 GW-2/3
	Rizzo (2005)	Rizzo (2005)	Rizzo (2005)		
	11/13/2002	11/13/2002	09/24/2003		
Naphthalene	<0.340	<0.240	<1.37	40/500	40/1,000
Extractable Petroleum Hydrocarbon (EPH) Fractions					
C9-C18 Aliphatics	<10.9	<10.9	<11.1	1,000/1,000	3,000/3,000
C19-C36 Aliphatics	<10.9	<10.9	<11.1	3,000/3,000	5,000/5,000
C11-C22 Aromatics	<10.9	<10.9	<11.1	1,000/1,000	3,000/3,000
Polynuclear Aromatic Hydrocarbons (PAHs)					
Naphthalene	<0.543	<0.543	<0.556	40/500	40/1,000
2-Methylnaphthalene	<0.543	<0.543	<0.556	80/300	80/500
Phenanthrene	<0.543	<0.543	<0.556	500/500	1,000/1,000
Acenaphthylene	<0.543	<0.543	<0.556	600/10	600/10
Acenaphthene	<0.543	<0.543	<0.556	1,000/1,000	3,000/3,000
Fluorene	<0.543	<0.543	<0.556	1,000/1,000	3,000/3,000
Anthracene	<0.543	<0.543	<0.556	1,000/1,000	3,000/3,000
Fluoranthene	<0.543	<0.543	<0.556	1,000/1,000	3,000/3,000
Pyrene	<0.543	<0.543	<0.556	1,000/1,000	3,000/3,000
Benzo(a)anthracene	<0.543	<0.543	<0.556	7/7	40/40
Chrysene	<0.543	<0.543	<0.556	70/70	400/400
Benzo(b)fluoranthene	<0.543	<0.543	<0.556	7/7	40/40
Benzo(k)fluoranthene	<0.543	<0.543	<0.556	70/70	400/400
Benzo(b/k)fluroanthene	<0.543	<0.543	<1.112	NE	NE
Benzo(a)pyrene	<0.543	<0.543	<0.556	2/2	4/4
Indeno(1,2,3-cd)pyrene	<0.543	<0.543	<0.556	7/7	40/40

DETECTED CONTAMINANTS	CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM (mg/Kg), approximately Parts per Million (ppm)				
	GP-4	GP-5	SH-7	MCP METHOD 1 RISK CRITERIA	
	8-12'	4-8'	3-4'	S-1 GW-2/3	S-2 GW-2/3
	Rizzo (2005)	Rizzo (2005)	Rizzo (2005)		
	11/13/2002	11/13/2002	09/24/2003		
Dibenzo(a,h)anthracene	<0.543	<0.543	<0.556	0.7/0.7	4/4
Benzo(g,h,i)perylene	<0.543	<0.543	<0.556	1,000/1,000	3,000/3,000

ND = Not Detected above unspecified analytical method lower detection limit
NE = Not Established, number in parentheses is MCP Soil Reportable Concentration
c (as in 20.5c) = TPH concentration calculated from VPH + EPH, using one-half the detection limit for concentrations not determined above the analytical method lower detection limit
Concentrations shown in **BOLD** were identified above the analytical method lower detection limit
Concentrations shown in **RED** exceed applicable Method 1 Soil S-1 Risk Criteria

TABLE 3. — CONCENTRATIONS OF DETECTED CONTAMINANTS IN GROUNDWATER AT 515 SOMERVILLE AVENUE, SOMERVILLE, MA
Within and Near RTN 3-28548

DETECTED CONCENTRATIONS	CONCENTRATIONS IN MICROGRAMS PER LITER (µg/L), approximately Parts per Billion (ppb)									
	AE-103				RIZ-2		GP-4		SH-7	METHOD 1 GW-2/3 RISK CRITERIA
	03/03/2010	06/09/2010	09/09/2010	02/04/2011	10/26/1992	11/19/2002	11/14/2002	09/23/2003	09/25/2003	
Volatile Organic Compounds (VOCs) (USEPA Method 8260)										
1,3,5-Trimethylbenzene	NT	NT	NT	NT	NT	<2.5	<2.5	NR	NR	NE
1,2,4 -Trimethylbenzene	NT	NT	NT	NT	NT	<2.5	<2.5	NR	NR	NE
Ethylbenzene	<5.0	<5.0	<5.0	<5.0	<1.0	<0.50	<0.50	<2.00	<2.00	20,000/5,000
Toluene	<5.0	<5.0	<5.0	<5.0	**13**	<0.75	<0.75	<2.00	<2.00	50,000/40,000
Xylenes	<20	<20	<20	<20	<1.0	<1.00	<1.00	<4.00	<4.00	9,000/5,000
Methyl tert-butyl ether	<10	<10	<10	<10	<10	<1.0	**1.7**	<4.00	<4.00	50,000/50,000
Naphthalene	<10	<10	<10	<10	NT	<2.5	<2.5	<20.0	<20.0	1,000/20,000
n-Butylbenzene	NT	NT	NT	NT	NT	<0.50	<0.50	NR	NR	NE
sec-Butylbenzene	NT	NT	NT	NT	NT	<0.50	<0.50	NR	NR	NE
Isopropylbenzene	NT	NT	NT	NT	NT	<0.50	<0.50	NR	NR	NE
p-Isopropyltoluene	NT	NT	NT	NT	NT	<0.50	<0.50	NR	NR	NE
n-Propylbenzene	NT	NT	NT	NT	NT	<0.50	<0.50	NR	NR	NE
Tetrachloroethene	NT	NT	NT	NT	<1.5	<0.50	<0.50	<0.50	<0.50	50/30,000
Trichloroethene	NT	NT	NT	NT	<1.0	<0.50	<0.50	<0.50	<0.50	30/50,000
cis-1,2-Dichloroethene	NT	NT	NT	NT	NT	<0.50	<0.50	<0.50	**5.9**	100/50,000
Chlorobenzene	NT	NT	NT	NT	<3.5	<0.50	<0.50	<0.50	**0.58**	200/1,000

DETECTED CONCENTRATIONS	CONCENTRATIONS IN MICROGRAMS PER LITER (µg/L), approximately Parts per Billion (ppb)									
	AE-103				RIZ-2		GP-4		SH-7	METHOD 1 GW-2/3 RISK CRITERIA
	03/03/2010	06/09/2010	09/09/2010	02/04/2011	10/26/1992	11/19/2002	11/14/2002	09/23/2003	09/25/2003	
Total Petroleum Hydrocarbons (TPH) (USEPA Method 8100)										
TPH	<700c	<700c	<700c	<700c	<500	<438c	<420c	<432c	**218.3c**	5,000/5,000
Volatile Petroleum Hydrocarbons (VPH)										
C5-C8 Aliphatics	<50	<50	<50	<50	NT	<40.0	<40.0	<40.0	<40.0	3,000/50,000
C9-C12 Aliphatics	<50	<50	<50	<50	NT	<40.0	<40.0	<40.0	**53.3**	5,000/50,000
C9-C10 Aromatics	<50	<50	<50	<50	NT	<40.0	<40.0	<40.0	**165**	7,000/50,000
Extractable Petroleum Hydrocarbons (EPH)										
C9-C18 Aliphatics	<200	<200	<200	<200	NT	<106	<100	<104	<116	5,000/50,000
C19-C36 Aliphatics	<200	<200	<200	<200	NT	<106	<100	<104	<116	NA/50,000
C11-C22 Aromatics	<150	<150	<150	<150	NT	<106	<100	<104	<116	50,000/5,000
EPH Target Polynuclear Aromatic Hydrocarbons (PAHs)										
PAHs	ND	ND	ND	ND	NT	ND	ND	ND	ND	CS

NR = Not Reported
NT = Not Tested
ND = Not Detected above unspectified analytical detection limit
NE = Not Established, value shown in parentheses is analogous MCP Groundwater GW-2 Reportable Concentration
NA = Not Applicable
CS = Compound-Specific Standards
Concentrations shown in **BOLD** exceed analytical method lower detection limits
Concentrations shown in **RED** exceed applicable Method 1 GW-2/3 Risk Criteria

Table 4
Summary of Groundwater Physio-chemical Parameters
515 Somerville Avenue
Somerville, Massachusetts

		Temperature	Specific Conductivity	Specific Conductivity	% Dissolved Oxygen	Dissolved Oxygen	pH	Redox Potential	Time
Units		°C	µS/cm²	µS/cm	--	mg/L	--	mV	--
Sample ID	Sample Date								
AE-101	03/03/10	6.59	97	63	91.4	11.20	6.17	160.5	12:26 PM
	06/09/10	15.44	62	51	91.9	9.18	6.23	197.9	10:10 AM
	09/09/10	16.70	78	65	59.2	5.77	5.69	202.0	1:42 PM
	02/04/11	11.27	114	84	39.2	4.29	5.53	167.5	11:40 AM
AE-102	03/03/10	6.28	791	508	69.2	8.54	6.12	237.5	11:20 AM
	06/09/10	13.90	401	316	56.6	5.81	6.16	288.3	10:35 AM
	09/09/10	16.80	397	336	67.6	0.74	6.13	161.4	1:08 PM
AE-103	03/03/10	9.04	2264	1573	50.6	5.81	6.13	238.2	10:52 AM
	06/09/10	13.06	107	824	63.3	6.64	6.09	329.5	10:58 AM
	09/09/10	16.00	1384	1145	23.1	2.27	6.14	193.3	12:40 PM
AE-104	03/03/10	10.36	551	397	19.1	2.14	6.51	139.6	9:17 AM
	06/09/10	13.33	967	751	6.2	0.65	6.34	222.1	11:38 AM
	09/09/10	16.70	1337	1125	13.0	1.25	5.79	213.5	12:10 PM
AE-106	03/03/10	7.86	249	167	52.0	6.17	6.02	201.3	9:40 AM
	06/09/10	13.37	552	430	71.5	7.46	5.77	340.2	12:15 PM
	09/09/10	18.60	192	169	38.8	3.60	6.23	173.8	10:30 AM
AE-107	03/03/10	7.73	1725	1156	58.6	6.94	5.92	237.80	10:25 AM
	06/09/10	13.63	1872	1466	53.1	5.48	6.22	355.0	12:40 PM
	09/09/10	17.00	1319	1114	46.0	4.43	6.79	181.7	11:05 AM
AE-108	03/03/10	8.24	922	627	48.0	5.63	5.40	231.0	10:05 AM
	06/09/10	13.44	815	635	59.1	6.15	5.32	353.2	1:07 PM
	09/09/10	16.40	1305	1091	3.6	0.35	5.33	250.9	11:40 AM
AE-109	03/03/10	6.28	989	635	45.8	5.63	6.19	180.2	11:50 AM
	06/09/10	15.29	2621	2135	24.4	2.43	5.89	273.0	1:39 PM
	09/09/10	19.70	1019	915	0.7	0.07	6.65	-152.7	2:15 PM

NOTES:

°C	degrees Celsius
mg/L	milligrams per liter
µS/cm	microSiemens per centimeter
mV	millivolts

Clean Properties Inc.
Environmental Assessment & Cleanup

Table 5
Summary of Monitoring Well Gauging Data
515 Somerville Avenue
Somerville, Massachusetts

Well ID	Date	Relative TOC Elevation	Water Depth	NAPL Depth	NAPL Thickness	Relative Piezometric Head
AE-101	3/2/10	97.87	6.10	-	-	91.77
	3/3/10		6.65	-	-	91.22
	6/9/10		7.22	-	-	90.65
	9/9/10		8.82	-	-	89.05
	2/3/11		7.89	-	-	89.98
AE-102	3/2/10	98.70	6.94	-	-	91.76
	3/3/10		7.12	-	-	91.58
	6/9/10		8.27	-	-	90.43
	9/9/10		9.86	-	-	88.84
	2/3/11		8.89	-	-	89.81
AE-103	3/2/10	99.35	8.72	-	-	90.63
	3/3/10		8.70	-	-	90.65
	6/9/10		8.50	-	-	90.85
	9/9/10		10.68	-	-	88.67
	2/3/11		9.74	-	-	89.61
AE-104	3/2/10	100.50	10.13	-	-	90.37
	3/3/10		10.09	-	-	90.41
	6/9/10		10.85	-	-	89.65
	9/9/10		12.03	-	-	88.47
	2/3/11		11.09	-	-	89.41
AE-106	3/2/10	100.00	9.28	-	-	90.72
	3/3/10		9.28	-	-	90.72
	6/9/10		10.06	-	-	89.94
	9/9/10		11.39	-	-	88.61
	2/3/11		10.38	-	-	89.62
AE-107	3/2/10	98.83	4.62	-	-	94.21
	3/3/10		4.70	-	-	94.13
	6/9/10		6.22	-	-	92.61
	9/9/10		8.62	-	-	90.21
	2/3/11		7.30	-	-	91.53
AE-108	3/2/10	99.46	8.57	-	-	90.89
	3/3/10		8.58	-	-	90.88
	6/9/10		9.46	-	-	90.00
	9/9/10		10.79	-	-	88.67
	2/3/11		9.80	-	-	89.66
AE-109	3/2/10	98.46	5.90	-	-	92.56
	3/3/10		6.48	-	-	91.98
	6/9/10		7.19	-	-	91.27
	9/9/10		9.41	-	-	89.05
	2/3/11		8.17	-	-	90.29

Clean Properties Inc.
Environmental Assessment & Cleanup

NOTES
All depths in feet
NAPL - Non-aqueous phase liquid hydrocarbons
TOC Elevation - Top of casing relative to arbitrary elevation of 100 feet at AE-106
Piezometric Head - Elevation of piezometric surface without correction for NAPL

Table 6. — Exposure Point Concentrations of Detected CoCs Compared to Applicable Risk Criteria.

	CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM (mg/Kg), approximately Parts per Million (ppm)			
DETECTED CONTAMINANT OF CONCERN (CoC)	**EXPOSURE POINT CONCENTRATION IN SOIL (Maximum Detected)***	**APPLICABLE MCP METHOD 1 RISK CRITERIA (S-1 GW-2,3 / S-3 GW-2,3)†**	**UPPER CONCENTRATION LIMIT (UCL)**	**PROPERTY-WIDE AVERAGE OUTSIDE RELEASE SITES‡**
VPH C5-C8 Aliphatics	**26.9 / 357**	100 / 500	5,000	26.1
VPH C9-C12 Aliphatics	**15.4 / 232**	1,000 / 5,000	20,000	19.5
VPH C9-C10 Aromatics	**23.9 / 170**	100 / 500	5,000	15.2
Benzene	**0.790** / 1.05	30 /700	9,000	0.117
Ethylbenzene	**1.61** / 1.05	500 / 1,000	10,000	0.160
Naphthalene	**1.74** / 5.20	40 / 40	10,000	0.793
Xylenes	**14.0 / 25.4**	300 / 300	10,000	2.25
EPH C9-C18 Aliphatics	**11.8** / 3.79	1,000 / 5,000	20,000	6.09
EPH C19-C36 Aliphatics	**54.8 / 8.48**	3,000 / 5,000	20,000	13.5
EPH C11-C22 Aromatics	**63.6 / 11.2**	1,000 / 5,000	10,000	44.8
Phenanthrene	**1.66** / 0.190	500 / 3,000	10,000	4.69
Fluoranthene	**1.74** / 0.190	1,000 / 5,000	10,000	4.43
Pyrene	**1.48** / 0.190	1,000 / 5,000	2,000	6.00
Benzo(a)anthracene	**0.698** / 0.190	7 / 300	3,000	1.80
Chrysene	**0.950** / 0.190	70 / 3,000	10,000	1.83
Benzo(b)fluoranthene	**0.758** / 0.190	7 / 300	3,000	1.56

	CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM (mg/Kg), approximately Parts per Million (ppm)			
DETECTED CONTAMINANT OF CONCERN (CoC)	**EXPOSURE POINT CONCENTRATION IN SOIL (Maximum Detected)***	**APPLICABLE MCP METHOD 1 RISK CRITERIA (S-1 GW-2,3 / S-3 GW-2,3)†**	**UPPER CONCENTRATION LIMIT (UCL)**	**PROPERTY-WIDE AVERAGE OUTSIDE RELEASE SITES‡**
Benzo(k)fluoranthene	**0.614** / 0.190	70 / 3,000	10,000	1.25
Benzo(a)pyrene	**0.675** / 0.190	2 / 30	300	1.41
Indeno(1,2,3-cd)pyrene	**0.532** / 0.190	7 / 300	3,000	0.888
Benzo(g,h,i)perylene	**1.43** / 0.190	1,000 / 5,000	10,000	1.21
Lead	**124**	300 / 300	3,000	95.1
Arsenic	**2.42**	20 / 20	200	3.16
Barium	**41.7**	1,000 / 5,000	10,000	40.8
Chromium	**8.13**	30 / 200	2,000	10.8
Mercury	**0.204**	20 / 30	300	0.306

*Exposure Point Concentration used in this RAO. If shown in **bold**, based on maximum detected concentration. If not in bold, based on half the concentration of the lower analytical detection limit. EPCs shown in **bold red** exceed applicable Method 1 Risk Criteria.
† Method 1 Soil S-1/GW-2/3 Risk Criteria apply to all data locations except SWGT-SWall, where Method 1 Soil S-3/GW-2/3 Risk Criteria apply.
‡ Property-wide average soil concentrations identified outside release sites were documented in May 1, 2010, Phase II Comprehensive Site Assessment relative to RTN 3-23606.

Table 7. — CAM COMPLIANCE SUMMARY TABLE FOR DATA RELIED UPON FOR RESPONSE ACTION OUTCOME (RAO) CONCLUSIONS.

LABORATORY	LAB JOB ID	LAB SAMPLE ID	CLIENT SAMPLE ID	ANALYTICAL METHOD	QUALITY CONTROL DEFICIENCY
Alpha Analytical	9207615	9207615-04	JSS-RZ2-GW-401	9073	QC Summary Narrative Not Provided
			JSS-RZ2-GW-401	8260	
			JSS-RZ2-GW-401	8100M	
		9207615-05	JSS-RZ2-GW-402	8260	QC Summary Narrative Not Provided
Alpha Analytical	L0211671	L0211671-04	GP-4-GW	8260B	No deficiencies identified
		L0211671-05	GP-5-GW	8260B	
		L0211671-09	GP-4-8-12'	2540G	
			GP-4-8-12'	8260B	
		L0211671-10	GP-5-4-8'	2540G	
			GP-5-4-8'	8260B	
Alpha Analytical	L0211837	L0211837-01	RIZ-2-GW	8260B	QC Summary Narrative states that one sample above/below the acceptance criteria required for method; but analytical sheets do not show such a variance.
Alpha Analytical	L0309656	L0309656-21	GP-4	8260B	No deficiencies identified

LABORATORY	LAB JOB ID	LAB SAMPLE ID	CLIENT SAMPLE ID	ANALYTICAL METHOD	QUALITY CONTROL DEFICIENCY
Alpha Analytical	L0907709	L0907709-01	SE Gas Tank 1 SWall	VPH	QC Summary Narrative indicates that not all QC performance standards and recommendations for the specified methods were achieved: VPH Samples L0907709-01 through -10 fell short of the recommended 1:1 methanol: soil ratio due to insufficient soil in the sample vial. VPH Sample L0907709-06 has elevated detection limits due to dilution required by the elevated concentrations of target compounds in the sample. EPH QC Sample WG366739-2/3 LCS/LCSD RPD associated with L0907709-01 through -11 is above the acceptance criteria for nonane (C9) at 27%; however, the individual LCS/LCSD recoveries are within method limits.
			SE Gas Tank 1 SWall	EPH	
		L0907709-02	SE Gas Tank 1 Base	VPH	
			SE Gas Tank 1 Base	EPH	
		L0907709-03	SE Gas Tank 1 EWall	VPH	
			SE Gas Tank 1 EWall	EPH	
		L0907709-04	SE Gas Tank 1 WWall	VPH	
			SE Gas Tank 1 WWall	EPH	
		L0907709-05	SE Gas Tank 1 Nwall	VPH	
			SE Gas Tank 1 NWall	EPH	
		L0907709-06	SW Gas Tank 2 SWall	VPH	
			SW Gas Tank 2 SWall	EPH	
		L0907709-07	SW Gas Tank 2 Base	VPH	
			SW Gas Tank 2 Base	EPH	
		L0907709-08	SW Gas Tank 2 NWall	VPH	
			SW Gas Tank 2 NWall	EPH	
		L0907709-09	SW Gas Tank 2 EWall	VPH	
			SW Gas Tank 2 EWall	EPH	
		L0907709-10	SW Gas Tank 2 WWall	VPH	
			SW Gas Tank 2 WWall	EPH	
		L0907709-11	West GT Base	VPH	
			West GT Base	EPH	

LABORATORY	LAB JOB ID	LAB SAMPLE ID	CLIENT SAMPLE ID	ANALYTICAL METHOD	QUALITY CONTROL DEFICIENCY
Alpha Analytical	L0907777	L0907777-02	Southern Gas Tank Solids	Waste Characterization	QC Summary Narrative indicates that not all QC performance standards and recommendations for the specified methods were achieved and not all results for all analyte-list compounds/elements for the specified methods reported. QC Summary Narrative stated that the QC sample WG367369-1/2 LCS/LCSD recoveries associated with L0907777-02 are outside the acceptabnce criteria for several compounds; however they have been identified as "difficult" analytes. The results of the associated samples reported, however, all results are considered to have a potentially high bias for bromomethane (LCS at 134%) and a potentially low bias for dichlorofluoromethane (66% - 64%).
Alpha Analytical	L0908376	L0908376-02	Southern Gas Tank Solids	1131	No deficiencies identified
NET Lab	V0219-20		AE103-0/3	VPH/EPH	
NET Lab	V0219-20A		AE103-0/3	6010B	
NET Lab	V0304-20		AE103	VPH/EPH	
NET Lab	V0610-18		AE103	VPH/EPH	
NET Lab	V0910-31		AE103	VPH/EPH	
NET Lab	V0125-31		CSW-1	VPH/EPH	
NET Lab			EF-2	VPH/EPH	
NET Lab	W0204-23		AE103	VPH/EPH	

FIGURES

Figure 1. - Locus Map of the vicinity of Disposal Sites 3-23606, 3-28545, 3-28546, and 3-28548 at 515 Somerville Avenue in the City of Somerville, Massachusetts [Shown on parts of U.S. Geological Survey 1985 Boston North (42071-D1-TM-025) and 1987 Boston South (42071-C1-TM-025) metric topographic quadrangles [Scale = 1:25,000; Contour Interval = 3 meters (~10 feet); Orange Circles represent 500-foot and 0.5-mile radii around Sites].

KEY

- Former Underground Storage Tank
- Limit of RTN
- Existing Building
- Former Building

N

Concrete Slab of Demolished Building

Off-Site Building

Remaining Building

RTN 3-28545 Revised

Approximate Location of 100-gal UST

Approximate Location of 5,000-gal Fuel-Oil UST

Approximate Location of 5,000-gal Stoddard Solvent UST

RTN 3-4350

RTN 3-28546 Revised

Right of Way for travel over an undefined area

Former Asphalt-Paved Parking Lot

Off Site Building

West 1,000 gal. Gasoline UST

RTN 3-23606

Demolished Building

LAUREL STREET

RTN 3-28548

SW 1,000 gal GAS TANK #2

SE 1,000 gal GAS TANK #1

SCALE: 1" = 40'

0 40

Sidewalk

SOMERVILLE AVENUE

SITE PLAN

515 Somerville Avenue
Somerville, MA

Figure 2
DWN BY: HS
CKD BY: RH
File: 3120 Site Plan 6-4-10

Project 3120
February 17,1011
June 4, 2010
April 23, 2010

Clean Properties Inc
Environmental Assessment & Cleanup

111 Boston Post Road
Suite 211
Sudbury, MA 01776

Phone: 978-443-6622
Fax: 781-577-1510
www.CleanProperties.com

Figure 3. - MassDEP - Bureau of Waste Site Cleanup

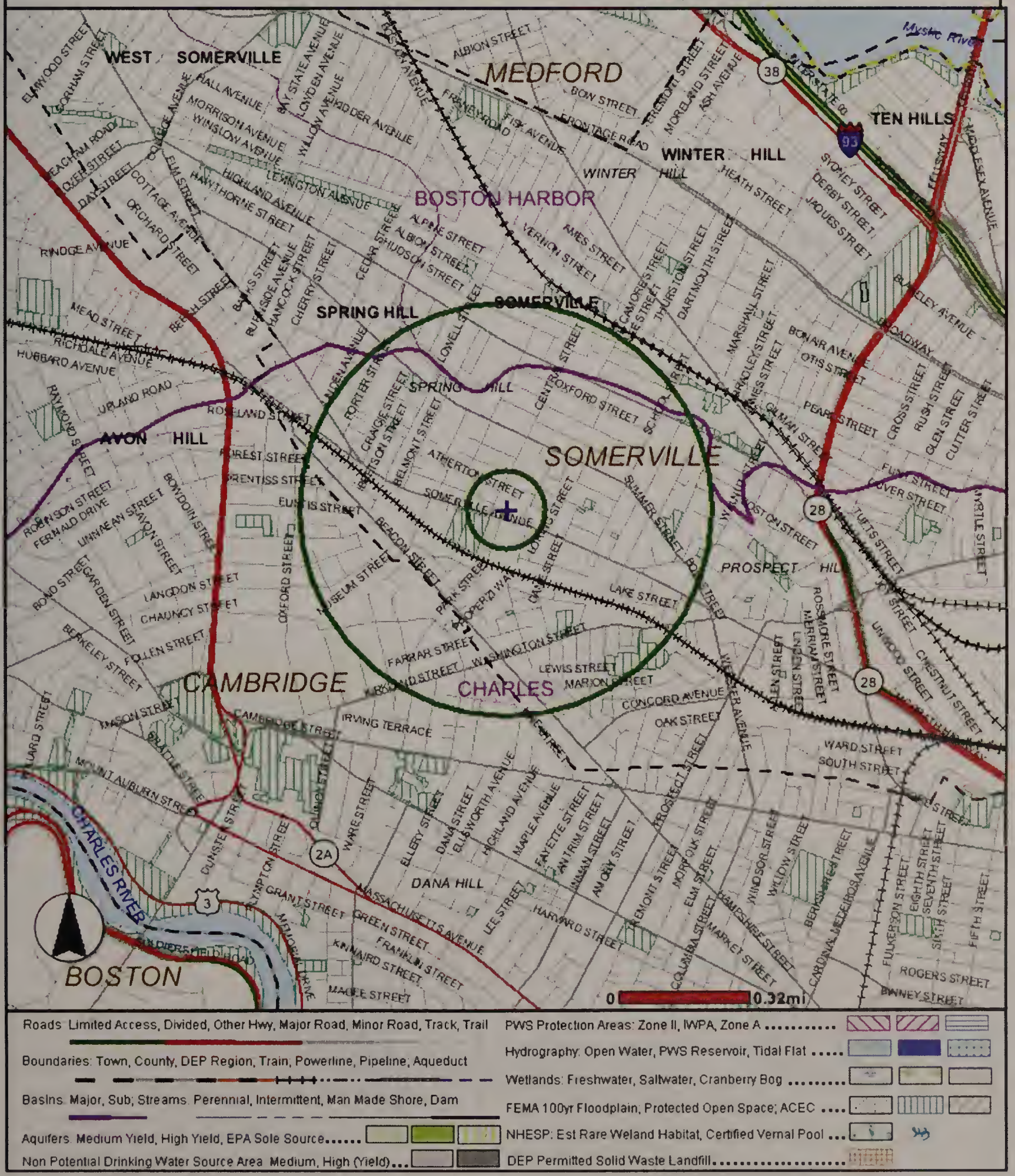
MCP Numerical Ranking System Map: 500 feet & 0.5 Mile Radii

Site Name:
RTN:
NAD83 MA Coordinates:
232436mE, 903740mN

December 29, 2010

The information shown on this map is the best available at the date of printing. For more information please refer to www.mass.gov/mgis/massgis.htm

MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail

Boundaries: Town, County, DEP Region, Train, Powerline, Pipeline, Aqueduct

Basins: Major, Sub; Streams: Perennial, Intermittent, Man Made Shore, Dam

Aquifers: Medium Yield, High Yield, EPA Sole Source

Non Potential Drinking Water Source Area: Medium, High (Yield)

PWS Protection Areas: Zone II, IWPA, Zone A

Hydrography: Open Water, PWS Reservoir, Tidal Flat

Wetlands: Freshwater, Saltwater, Cranberry Bog

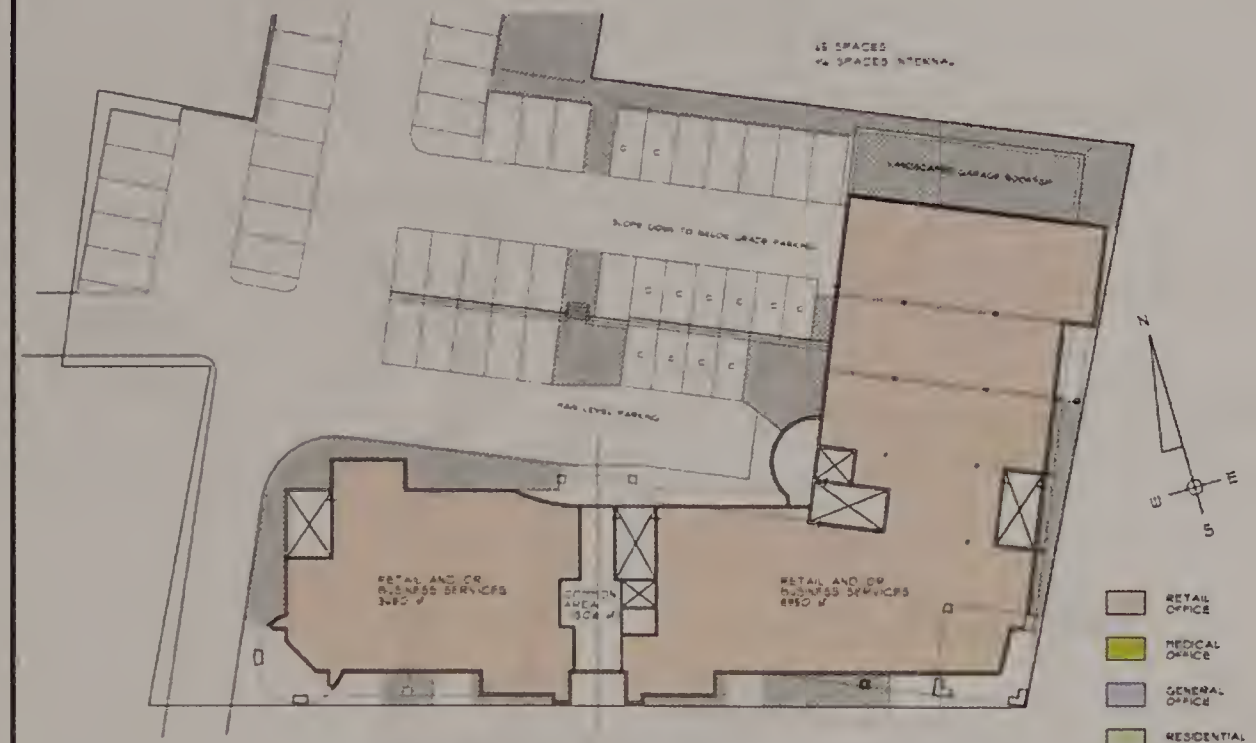
FEMA 100yr Floodplain; Protected Open Space; ACEC

NHESP: Est Rare Weland Habitat, Certified Vernal Pool

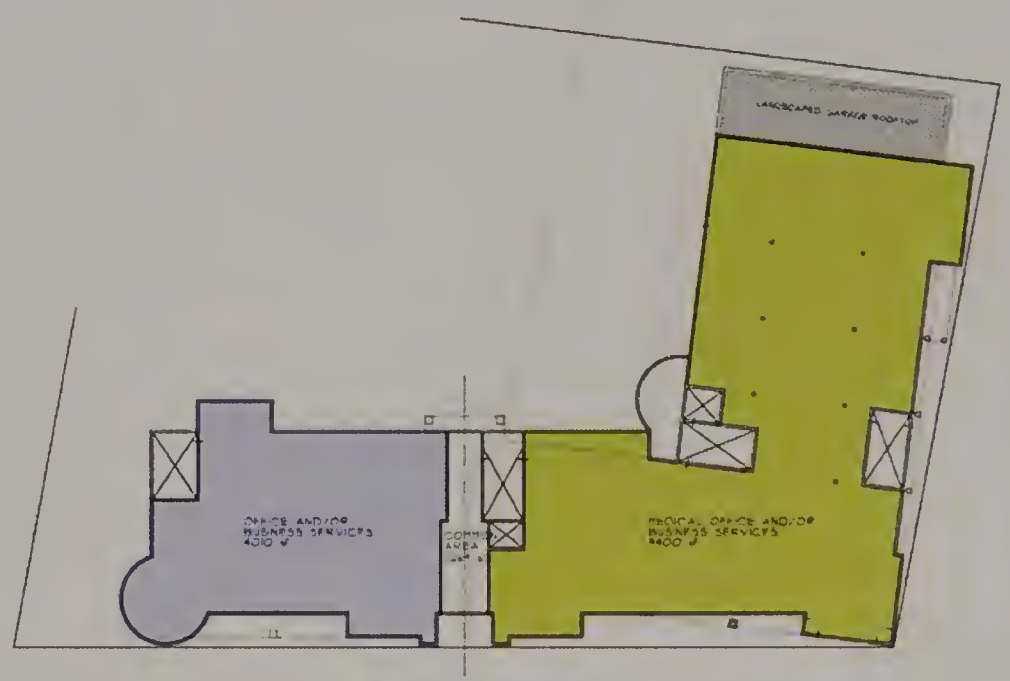
DEP Permitted Solid Waste Landfill

THIRD FLOOR CONCEPT PLAN
515 SOMERVILLE AVE
REEVES DESIGN ASSOCIATES - KFP

FOURTH FLOOR/MEZZANINE CONCEPT PLAN
515 SOMERVILLE AVE
REEVES DESIGN ASSOCIATES - KFP



FIRST FLOOR CONCEPT PLAN
515 SOMERVILLE AVE
REEVES DESIGN ASSOCIATES - KFP



SECOND FLOOR CONCEPT PLAN
515 SOMERVILLE AVE
REEVES DESIGN ASSOCIATES - KFP

Figure 5. – Conceptual floor plans identifying possible occupancy of the commercial building proposed for 515 Somerville Avenue.

KEY

- Limit of RTN
- Existing Building
- Proposed Building
- Former Building
- Former Underground Storage Tank

N

Concrete Slab of Demolished Building

Off-Site Building

Remaining Building

RTN 3-28545 Revised

Approximate Location of 100-gal UST

Approximate Location of 5,000-gal Fuel-Oil UST

Approximate Location of 5,000-gal Stoddard Solvent UST

RTN 3-4350

RTN 3-28546 Revised

Right of Way for travel over an undefined area

Former Asphalt-Paved Parking Lot

Off Site Building

West 1,000 gal. Gasoline UST

RTN 3-23606

LAUREL STREET

Demolished Building

Proposed Building

RTN 3-28548

SW 1,000 gal GAS TANK #2

SE 1,000 gal GAS TANK #1

SCALE: 1" = 40'

0 40

Sidewalk

SOMERVILLE AVENUE

SITE PLAN

515 Somerville Avenue
Somerville, MA

Figure 4
Project 3120

DWN BY: HS
CKD BY: RH
File: 3120 Site Plan 6-4-10

February 17,1011
June 4, 2010
April 23, 2010

Clean Properties LLC
Environmental Assessment & Cleanup

111 Boston Post Road
Suite 211
Sudbury, MA 01776

Phone: 978-443-6622
Fax: 781-577-1510
www.CleanProperties.com

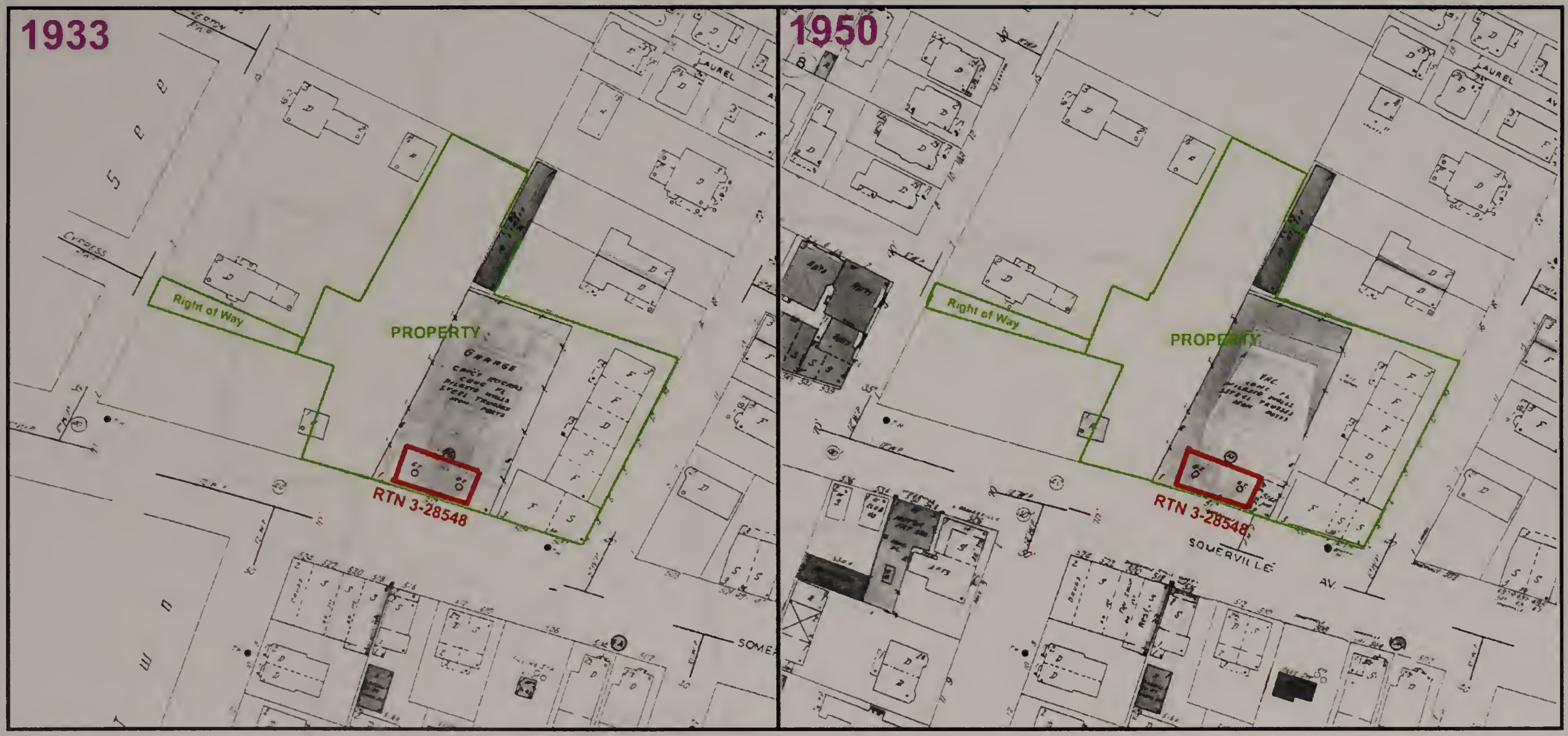


Figure 6. – Sanborn Company 1933/1955 Fire Insurance Maps of the vicinity of the Property at 515 Somerville Avenue, showing the former gasoline tanks associated with RTN 3-28548.

KEY

AE-107 — Groundwater Monitoring Well

Groundwater Contour

89.62 — Groundwater Elevation

Limit of RTN

Former Underground Storage Tank

N

RTN 3-28545 Revised

Approximate Location of 100-gal UST

Approximate Location of 5,000-gal Fuel-Oil UST

Approximate Location of 5,000-gal Stoddard Solvent UST

AE-109 90.29

AE-107 91.53

RTN 3-4350

RTN 3-28546 Revised

Groundwater Flow Direction

RTN 3-23606

West 1,000 gal. Gasoline UST

AE-101 89.98

AE-102 89.81

AE-108 89.66

AE-106 89.62

AE-104 89.41

RTN 3-28548

SW 1,000 gal GAS TANK #2

AE-103 89.61

SE 1,000 gal GAS TANK #1

90.5

91.0

91.5

91.0

90.5

90.0

90.0

89.5

89.5

SCALE: 1" = 40'

0 40

Groundwater Flow Map	
515 Somerville Avenue Somerville, MA	
Figure 7	Project 3120
DWN BY: HS	February 17,1011
CKD BY: RH	June 4, 2010
File: 3120 Site Plan 6-4-10	April 23, 2010

Action BOSTON Environmental
184 Riverview Avenue, Waltham, MA
(781) 893-9922 Fax (781) 893-6622

KEY

Drawing not to scale

- X — Approximate Location of UST closure Soil Samples
- X — Approximate Location of PCB Soil Samples
- Removed Underground Storage Tank
- Approximate location of excavation

N

SW Gas Tank 2 East Wall

SE Gas Tank 1 West Wall

SW Gas Tank 2 North Wall

CSW-1B

CSW-1C

SE Gas Tank 1 North Wall

SW Gas Tank 2 West Wall

SW Gas Tank

AE-103

SE Gas Tank

SE Gas Tank 1 East Wall

CSW-1A

CSW-1D

EF-2A

EF-2B

SW Gas Tank 2 Base

SE Gas Tank 1 Base

SE Gas Tank 1 South Wall

CSW-1E

Chain Link Fence

SW Gas Tank 2 South Wall

CSW-1F

Sidewalk

SOMERVILLE AVENUE

Closure Samples for UST Bed with PCB Sample Locations

515 Somerville Avenue, Somerville, MA

Figure 8

DWN BY: HS
CKD BY: RH
File: SW SE Gas Tanks

Project 3120

February 17, 2011
June 4, 2010
April 23, 2010

Action Environmental BOSTON
184 Riverview Avenue, Waltham, MA
(781) 893-9922 Fax (781) 893-6622

KEY

AE-107 Groundwater Monitoring Well

SH-6 Former Groundwater Monitoring Well

AE-111 Boring

TP-1 Test Pit

Limit of RTN

Former Underground Storage Tank

Existing Building

N

TP-2

TP-3

TP-1

AE-228

Off-Site Building

Remaining Building

AE-229

AE-111A

GP-3

AE-227

SH-4

AE-112

RTN 3-28545 Revised

MW-2

AE-218

AE-222

SB-2

AE-111

AE-110

AE-115

SH-2

AE-113

Approximate Location of 100-gal UST

SH-5

Approximate Location of 5,000-gal Fuel-Oil UST

Approximate Location of 5,000-gal Stoddard Solvent UST

AE-219

AE-109

AE-114

AE-223

AE-107

AE-105

AE-109

AE-107

MW-3

GP-1

SB-1

RTN 3-28546 Revised

SH-6

AE-225

RIZ-3

RTN 3-4350

AE-224

Right of Way for travel over an undefined area

AE-220

ET-3

ET-2

AE-226

West 1,000 gal. Gasoline UST

AE-101

SH-3

RTN 3-23606

GP-2

AE-106

Off Site Building

AE-101

AE-102

AE-102

AE-108

RIZ-1

LAUREL STREET

GP-4

MW-1

SH-7

SH-1

RTN 3-28548

GP-5

SW 1,000 gal GAS TANK #2

AE-103

SE 1,000 gal GAS TANK #1

RIZ-2

AE-104

ET-1

SCALE: 1" = 40'

0 40

Sidewalk

SOMERVILLE AVENUE

515 Somerville Avenue
Somerville, MA

Figure 9

Project 3120

DWN BY: HS — February 17,1011

CKD BY: RH — June 4, 2010

File: 3120 Site Plan 2-17-11 — April 23, 2010

Action Environmental BOSTON
184 Riverview Avenue, Waltham, MA
(781) 893-9922 Fax (781) 893-6622

APPENDIX A

BORING LOGS AT THE SITE

ACTION ENVIRONMENTAL BOSTON, 184 Riverview Avenue, 1st Floor, Waltham, MA 02453
Phone: 781-893-9922 Fax: 781-893-6622 Email: Remedies@ActionEnvironmental.net

ACTION ENVIRONMENTAL

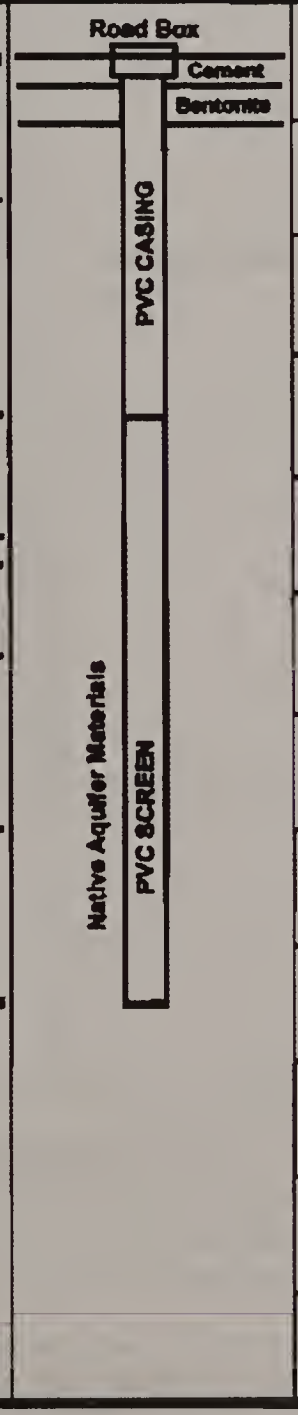
184 Riverview Ave. Phone: 781-893-9922
Waltham, MA 02453 Fax: 781-893-8622
Environmental Consultants & Engineers

PROJECT NO.: 3120
LOCATION: 515 Somerville Ave., Somerville, MA.
10.7' N of S fenceline and 101.9' E of SW corner of the Site fenceline

SHEET: 1 of 1
DATE: 02/18/2010
BORING NO.: AE-103

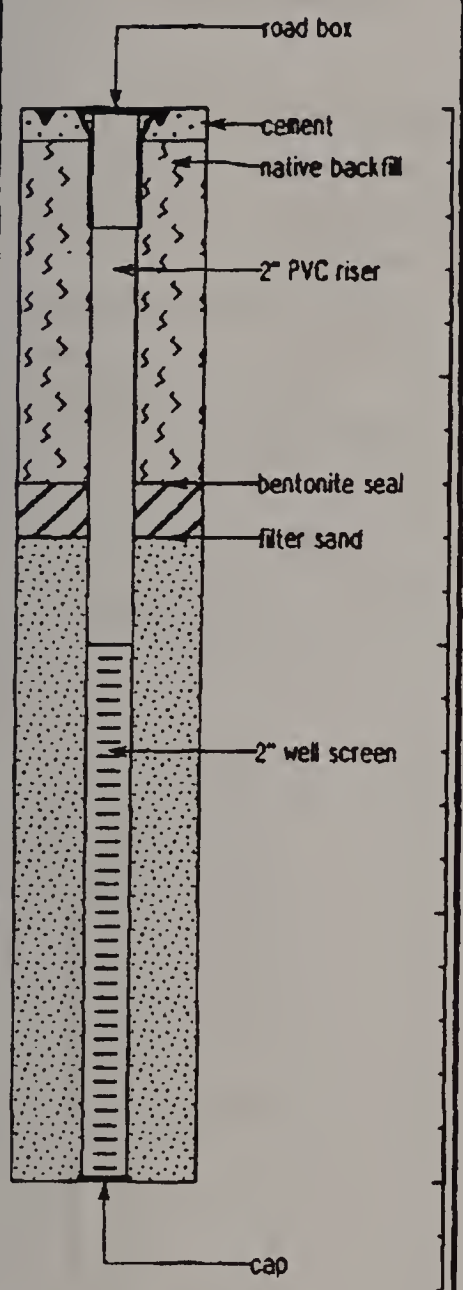
BORING CO.: Bronson Drilling		CASING	SAMPLER	GROUNDWATER		
FOREMAN: Dan Bronson	TYPE	Steel Corer	4' acrylic sleeve	DATE	DEPTH (Feet)	STABIL. TIME
ACTION Geologist: Robert Houghton	SIZE I.D.	1.625"	1.625"	03/02/10	8.72	12 days
Drilling Equipment: Tractor-mounted Push Probe						

DEPTH (Feet)	SAMPLE Recovery/Depth	BLOWS Per 6"	STRATA CHANGE	SOIL/ROCK STRATIGRAPHY[1]	FIELD TEST[2]	SAMPLE NO.
0	38" / 0 - 4'			Light Gravel cover		
2				SAND: fine-coarse grained, some silt, some rounded gravel, some coal and asphalt, dark brown, slight moist	ND	1-2' bg
4	38" / 4 - 8'			SAND: fine-coarse grained, some silt and gravel, compact, slight moisture, no odor, medium dark brown, slight coal	ND	4-5' bg
6				SAND: fine-coarse grained, some silt, moderate coal and abundant brick, dark brown at top, medium brown at base, dry, no odor	ND	6-7" bg
8	41" / 8 ' 12'			SAND: fine-medium grained, some silt, light brown, slightly moist, stratified, no odor		
10				SAND: fine-medium grained, silty, stratified, light grayish brown, occasional lamina of coarse sand, saturated, no odor, near top rare orange-colored lenses	ND	9-10' bg
12	48" / 12 - 16'			SAND: medium-coarse grained, gray, cross-bedded, saturated, no odor	ND	12-13' bg
14						
16				End of Exploration = 16 feet	ND	15-16' bg
18						
20				Monitoring Well materials are 1.0" I.D. PVC, 10' 0.001-slot screen and 6' casing, aluminum roadbox		
22						



[1] Soil Strata Identification: Evaluated according to Burmister Classification System.
[2] Field Test: Photoionization Detector (PID) readings in parts per million by volume (ppmv) by Massachusetts Department of Environmental Protection (MassDEP) Jar Headspace Method, according to Bureau of Waste Site Cleanup Policies #WSC-94-400 and #WSC-402-96.
ND = Not Detected above analytical method lower detection limit (0.01 ppmv)

RIZ-2



Blow Counts	Recov/Advance	PID (ppm)	Depth (ft)	Sample Interval	Graphic Log	Materials Description
grab		0.0				Dark brown medium grained sand, gravel, some clay
5 6 8 5	18/24"	0.0	5			
9 11 12 17	14/24"	0.0	10			Medium dense, brown fine grained silty sand
4 10 12 11	20/24"	0.0	15			
			20			End of boring
			25			

BORING LOG AND WELL CONSTRUCTION FOR WELL RIZ-2

Project: Solomon/Somerville | Project Number: 2428-01 | Location: Somerville, MA

Well Location: RIZ-2 is located near the southeastern corner of the Site building

Rizzo Associates, Inc.
Engineers and Environmental Scientists
235 West Central Street, Natick, MA 01760

Installation Date: October 24, 1992 | Depth of Boring: 20
Inspector: Cheryl A. Place | Depth to Water: 13.4
Contractor: Redwing | Surface Elev.:
Drilling Method: HSA | PID used: OVM

Rizzo Associates, Inc.
ENGINEERS AND ENVIRONMENTAL SCIENTISTS
One Grant Street, Framingham, MA 01701

Boring Log and Well Diagram

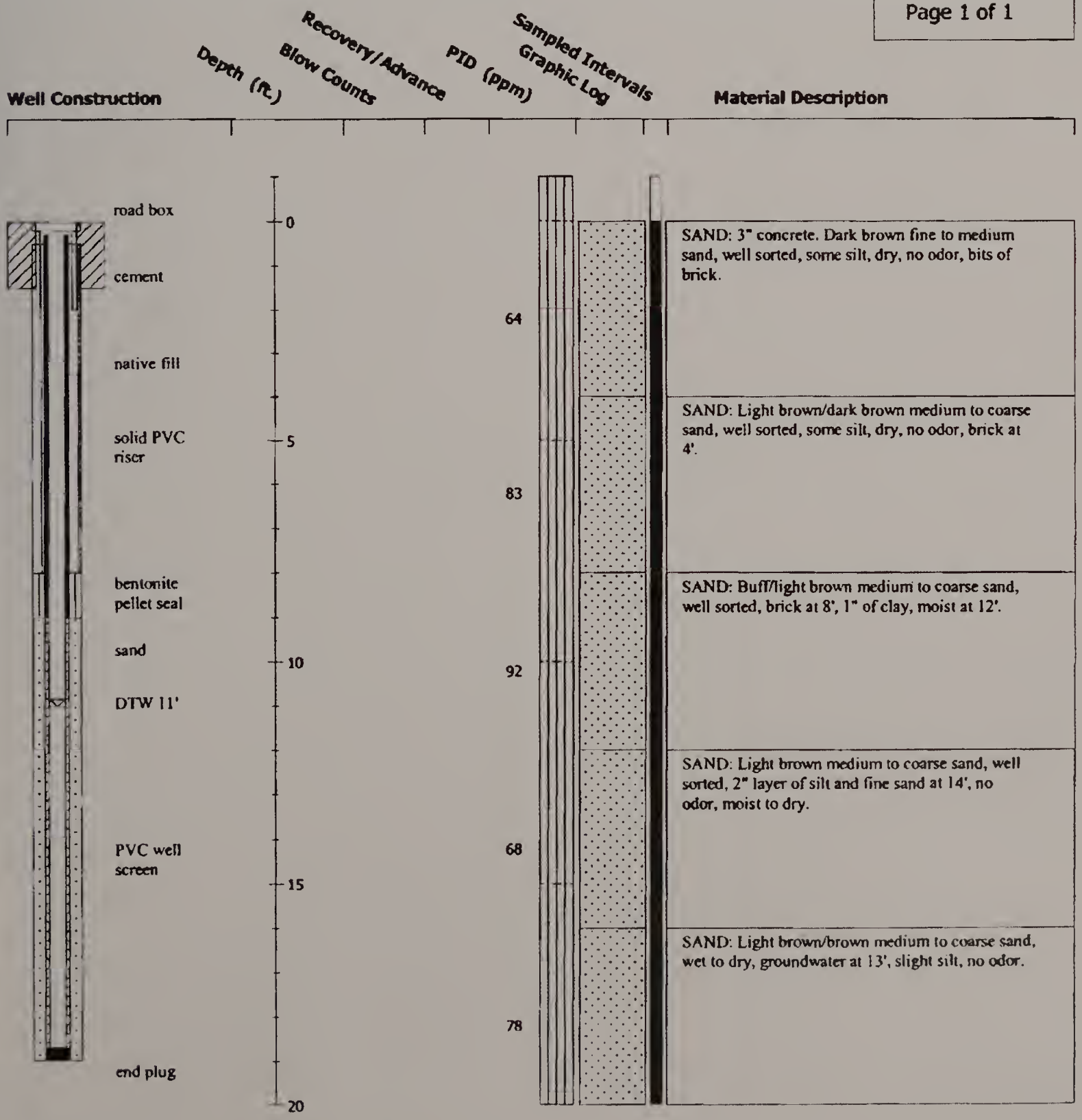
Boring #: GP-4

PROJECT INFORMATION

Project Name:	*John Solomon, Inc.*
Site Location:	*515 Somerville Avenue*
	Somerville, MA
Project Number:	*2428-07*
Date:	*11/13/02*
Inspector:	*JLD*

DRILLING INFORMATION

Drilling Company:	*Soil Exploration*
Driller:	*Richie and Brian*
Drill Rig:	*Track-mounted*
Drilling Method:	*GeoProbe*
Sampling Method:	*Direct Push*
Hammer Size:	*NA*


Well Construction
Depth (ft.)
Blow Counts
Recovery/Advance
PID (ppm)
Sampled Intervals
Graphic Log
Material Description
road box
cement
native fill
solid PVC riser
bentonite pellet seal
sand
DTW 11'
PVC well screen
end plug
0
5
10
15
20
64
83
92
68
78
SAND: 3" concrete. Dark brown fine to medium sand, well sorted, some silt, dry, no odor, bits of brick.
SAND: Light brown/dark brown medium to coarse sand, well sorted, some silt, dry, no odor, brick at 4'.
SAND: Buff/light brown medium to coarse sand, well sorted, brick at 8', 1" of clay, moist at 12'.
SAND: Light brown medium to coarse sand, well sorted, 2" layer of silt and fine sand at 14', no odor, moist to dry.
SAND: Light brown/brown medium to coarse sand, wet to dry, groundwater at 13', slight silt, no odor.

Rizzo Associates, Inc.
ENGINEERS AND ENVIRONMENTAL SCIENTISTS
One Grant Street, Framingham, MA 01701

Boring Log and Well Diagram

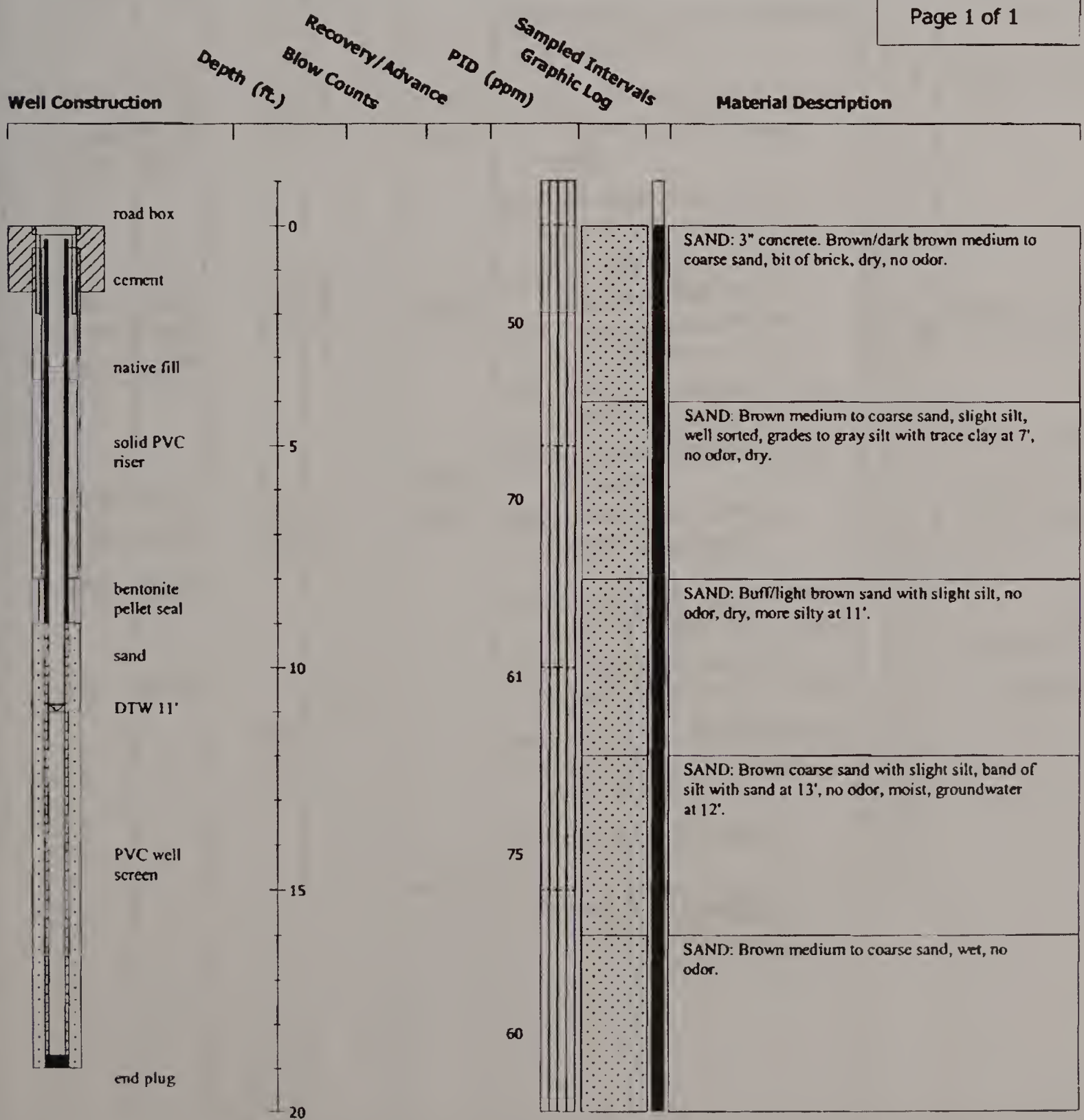
Boring #: GP-5

PROJECT INFORMATION

Project Name:	*John Solomon, Inc.*
Site Location:	*515 Somerville Avenue*
	Somerville, MA
Project Number:	*2428-07*
Date:	*11/13/02*
Inspector:	*JLD*

DRILLING INFORMATION

Drilling Company:	*Soil Exploration*
Driller:	*Richie and Brian*
Drill Rig:	*Track-mounted*
Drilling Method:	*GeoProbe*
Sampling Method:	*Direct Push*
Hammer Size:	*NA*



Sanborn, Head & Associates, Inc.
CONSULTING ENGINEERS & SCIENTISTS

Log of Monitoring Well SH-7

Sheet: 1 of 2

DRAFT

Project: 315 Somerville Ave.
Location: Somerville, MA
SHA Project No.: 2315.00
Drilling Method: Direct Push
Sampling Method: 4' Macrocore samplers
Drilling Company: EPI
Foreman: John Pitmore
Date Started: 9/24/03 Date Finished: 9/24/03
Logged By: CEC Checked By:

Ground Elevation:
TOC Elevation:
PVC Elevation:
Datum:

Groundwater Readings

Date	Time	Depth to Water	Ref. Pt.	Depth of Casing to Bottom	Stab. Time
9/24/03	1500	13.92	TOC	19.2	1 hr.

Depth (ft)	Sample No.	Depth (ft)	Recovery (inches)	PID Reading (ppm)	Log	Description
0	S1A	0.5-1.0		0		Concrete
	S1B	1.0-2.1	48/28	0		Fill
2	S1C	2.1-2.5		0		
4	S2A	4-4.5	48/45	0		Brown SAND
	S2B	4.5-4.9		0		
	S2C	4.9				
8	S3A	7-7.5	42/33	0		SILT
	S3B	7.5-8.3		0		
	S3C	8.3-10				
12	S4A	12-13	48/38	0		Brown SAND
	S4B	13-14.2		0		
14	S4C	14.2-15		0		
16	SS	16-16.5	48/29	2.6		
20						
22						
24						

Geologic Description

0-0.5 concrete

S1A: Dark brown-black f-c SAND and asphalt. FILL.

S1B: mixed brown f-c SAND, trace silt,

S1C: light orangish-brown f-m SAND, trace silt.

S2A: orangish-brown f-m SAND, trace silt.

S2B: light brown f-m SAND, little silt.

S2C: orange-brown f-c SAND, trace silt.

S3A: orangish-brown f-m SAND, trace silt.

S3B: brown silt, little f sand.

S3C: med. brown, f-m SAND, trace silt.

S4A: orange-brown f-m SAND, little silt. wet.

S4B: orange-brown f-c SAND, trace silt. wet.

S4C: brown, f-c SAND, little c sand, trace silt. wet.

SS: same as S4C

boring terminated @ 20 ft.

Well Diagram

Well Description

6" Flushmount Curb Box

Concrete Surface Seal (0 to 0.5')

1" Schedule 40 PVC riser (0 to 10')

Filter Sand (0.5 to 8.5')

Bentonite Seal (8.5 to 9')

1" PVC well screen (0.01" slots) (10 to 20')

Filter sand (9 to 20')

APPENDIX B

REMEDIATION WASTE DISPOSAL DOCUMENTATION

ACTION ENVIRONMENTAL BOSTON, 184 Riverview Avenue, 1st Floor, Waltham, MA 02453
Phone: 781-893-9922 Fax: 781-893-6622 Email: Remedies@ActionEnvironmental.net

For ARC Use Only

GENERATOR'S WASTE PROFILE SHEET

AGGREGATE RECYCLING CORPORATION

A. Generator Information

1. GENERATOR NAME: World 115 Nominee Trust
2. SITE STREET ADDRESS: PO Box 95025
3. SITE CITY, STATE: Newton, MA 02495
4. TECHNICAL CONTACT: Duncan Wood 5. PHONE: 603-415-6162

B. Site Description

1. CURRENT SITE USAGE: Construction site, former commercial laundry and fabric cutting shop
2. PROCESS GENERATING WASTE: Removal of abandoned gasoline tanks

C. Material Description

1. CONTAMINANTS:

VIRGIN PRODUCT

XXX GASOLINE	____ # 6 FUEL OIL	____ LUBE / CUTTING OIL
____ KEROSENE	____ MOTOR OIL	____ JP-4 / JET-A / JET FUEL
____ DIESEL	____ HYDRAULIC FLUID	____ OTHER (EXPLAIN):
____ # 2 FUEL OIL	____ MINERAL OIL	____
____ # 4 FUEL OIL	____ TRANSMISSION OIL	____

[ ] WASTE OIL

2. APPROXIMATE THE AMOUNT OF DEBRIS IN THIS MATERIAL: 10 %
ARC RETAINS THE OPTION OF CHARGING FOR DEBRIS IN EXCESS OF 15% UNLESS PREVIOUS ARRANGEMENTS ARE MADE.

3. HAS THIS SITE REMEDIATION BEEN SUPERVISED BY THE STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION?

[ ] YES [XXXX] NO

IF YES, PLEASE ATTACH SOIL SHIPMENT LETTER

4. CERTIFICATION - Please initial all appropriate sections:

[MC] I certify that, to the best of my knowledge, the waste material submitted to ARC does not contain regulated quantities of polychlorinated biphenyls, as defined by 40 CFR Part 761.

[MC] I certify that, based on knowledge of this site, the materials submitted to ARC are generated from remedial activities associated with a Petroleum Underground Storage Tank System regulated under 40 CFR Part 280. As such, this material is deferred from regulation under TCLP for Volatile and Semi-Volatile constituents.

[ ] I certify that, based on knowledge of the site, the materials submitted to ARC are generated from remedial activities involving a Petroleum Storage Tank used for the storage of heating oil for consumptive use on the premises where stored. As such, this material can be defined as "Household Waste" as defined in 40 CFR Part 261.4 (b) (1).

GENERATOR CERTIFICATION

By signing this profile sheet, the Generator certifies:

1. This waste is not a "Hazardous Waste" as defined by USEPA or State of Maine Regulations.
2. The portions of this sheet and attachments contain true and accurate descriptions of the waste material. All revelant information regarding known or suspected hazards in the possession of the Generator has been disclosed.
3. The analytical data presented herein or attached hereto were derived from testing a representative sample taken in accordance with 40 CFR 261.20(c), or equivalent rules.
4. If any changes occur in the character of the waste, the Generator shall notify ARC prior to providing the waste to ARC.

SIGNATURE: Mark Coppola TITLE: Trustee of World 115 Nominee Trust

NAME (print or type): Mark Coppola

P.O. Box 363 • Eliot, ME 03903
Phone 207-439-5584 • N.E. 800-639-7303 • Fax 207-439-5586

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)

BWSC-012A

Release Tracking Number*: 3 - 23606

A. LOCATION OF SITE OR DISPOSAL SITE WHERE REMEDIATION WASTE WAS GENERATED:

Release Name (optional):
Street: 515 Somerville Avenue Location Aid:
City/Town: Somerville ZIP Code: 02143-0000
Date/Period of Generation: June 11, 2009 to: June 12,2009
Additional Release Tracking Numbers Associated with this Bill of Lading:
** Note: If this Bill of Lading is the result of a Limited Removal Action (LRA) taken prior to Notification, a Release Tracking Number is not needed.*

B. PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH BILL OF LADING:

Name of Organization: World 115 Nominee Trust
Name of Contact: Mark Coppola Title: Trustee
Street: 327A Watertown Street
City/Town: Newton State: MA ZIP Code: 02459-0000
Telephone: (617) 969-4154 Ext:

C. RELATIONSHIP TO RELEASE OF PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH BILL OF LADING:

☑ RP or PRP Specify: ☐ Owner ☐ Operator ☐ Generator ☐ Transporter Other RP or PRP: Eligible Person, defined by M.G.L. Chap. 21E, s.2
☐ Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)
☐ Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))
☐ Other Person:

If an owner and/or operator is not conducting the response action associated with the Bill of Lading, provide on an attachment the name, contact person, address and telephone number, including any area code and extension, for each, if known.

D. TRANSPORTER OR COMMON CARRIER INFORMATION:

Transporter/Common Carrier Name: Removal Specialists
Contact Person: Shawn F. Clarke, Sr. Title: President
Street: PO Box 8069
City/Town: Lynn State: MA ZIP Code: 01904
Telephone: (781) 593-8666 Ext:

E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:

Operator/Facility Name: Aggregate Recycling Corporation
Contact Person: John Doherty Title: CEO
Street: 434 Dow Highway
City/Town: Elliot State: ME ZIP Code: 03903
Telephone: 781-341-5500 Ext:

Type of Facility: (check one)
☑ Asphalt Batch/Cold Mix ☐ Asphalt Batch/Hot Mix ☐ Thermal Processing
☐ Landfill/Disposal ☐ Landfill/Daily Cover ☐ Landfill/Structural Fill
☐ Incinerator ☐ Other: ☐ Temporary Storage

EPA Identification #:
Division of Hazardous Waste/Class A Permit #: Division of Solid Waste Management Permit #: S021B1WKBN
Actual/Anticipated Period of Temporary Storage (specify dates if applicable): to:
Reason for Temporary Storage:

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)

BWSC-012A

Release Tracking Number: 3 - 25606

E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION (continued):

Temporary Storage Address:

Street: _____

City/Town: _____ State: _____ ZIP Code: _____

F. DESCRIPTION OF REMEDIATION WASTE:
(check all that apply)

☐ Contaminated Media (check all that apply): ○ Soil ○ Groundwater ○ Surface Water ○ Other: _____

☐ Contaminated Debris (check all that apply): ○ Vegetation or Organic Debris ○ Demolition/Construction Waste ○ Inorganic Absorbent Materials ○ Other: _____

☐ Non-hazardous Uncontainerized Waste (check all that apply): ○ Non-aqueous Phase Liquid ○ Other: _____

☑ Non-hazardous Containerized Waste (check all that apply): ◉ Tank Bottoms/Sludges ○ Containers ○ Drums ○ Engineered Impoundments ○ Other: _____

Type of Contamination (check all that apply): ☑ Gasoline ☐ Diesel Fuel ☐ #2 Oil ☐ #4 Oil ☐ #6 Oil ☐ Waste Oil ☐ Kerosene ☐ Jet Fuel ☐ Other: _____

Estimated Volume of Materials: Cubic Yards: _____ Tons: _____ Other: _____

Containment Source (check one/specify): ☐ Transportation Accident ☐ Underground Storage Tank ☐ Other: _____

Response Action Associated with Bill of Lading (check one): ☐ Immediate Response Action ☑ Release Abatement Measure ☐ Utility-Related Abatement Measure ☐ Limited Removal Action ☐ Comprehensive Response Action ☐ Other _____

Remediation Waste Characterization Support Documentation attached:
☐ Site History Information ☐ Sampling and Analytical Methods and Procedures ☑ Laboratory Data ☐ Field Screening Data

If supporting documentation is not appended, provide an attachment stating the date and in connection with what document such information was previously submitted to DEP.

G. LICENSED SITE PROFESSIONAL (LSP) OPINION:

Name of Organization: Sanborn, Head & Associates, Inc.

LSP Name: Duncan W. Wood Title: Principal

Telephone: (978) 577-1019 Ext. _____

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this submittal, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of

(i) the standard of care in 309 CMR 4.02(1),
(ii) the applicable provisions of 309 CMR 4.02(2) and (3), and
(iii) the provisions of 309 CMR 4.03(5),

to the best of my knowledge, information and belief, the assessment actions undertaken to characterize the Remediation Waste which is (are) the subject of this submittal for acceptance at the facility identified in this submittal comply with the applicable provisions of 310 CMR 40.0000, and such facility is permitted to accept Remediation Waste having the characteristics described in this submittal. I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

LSP Signature: _____ Seal.

Date: August 12, 2009

License Number: 8765

COMMONWEALTH OF MASSACHUSETTS
DUNCAN W. WOOD
No. 8765
REGISTERED LICENSED SITE PROFESSIONAL

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012A

BILL OF LADING (pursuant to 310 CMR 40.0060)

Release Tracking Number*
3 - 23606

H. CERTIFICATION OF PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH THIS BILL OF LADING:

I certify under penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained herein is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

Signature: Mark Coppola Date: 8/12/09

Name of Person (print): Mark Coppola

Massachusetts Department of Environmental Protection BWSC-012B
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET 1 OF 1

Release Tracking Number 3-23606

I. LOAD INFORMATION:

Load 1:
Signature of Transporter Representative:
Date of Shipment: 8-31-09
Time of Shipment: 9:01 ☒ AM ☐ PM
Truck/Tractor Registration: #54
Trailer Registration (if any): N/A

Receiving Facility/Temporary Storage Representative:
Date of Receipt: 8/31/09
Time of Receipt: 10:08 ☒ AM ☐ PM
Load Size (cu. yds./tons): 14.49

Load 2:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 3:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 4:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 5:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 6:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

Total Volume Recorded This Page (cu. yds./tons): 14.49
Total Carried Forward (cu. yds./tons): -0-
Total Carried Forward and This Page (cu. yds./tons): 14.49

Revised 10/3/94

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012C

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET 1 OF 1

Release Tracking Number: 3 - 23606

K. SUMMARY OF SHIPMENTS:

Date of Shipment:	Date of Receipt:	Number of Loads Shipped:	Daily Volume Shipped (cu. yds./tons):
8/31/09	8/31/09	1	14.49

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012C

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY SHEET

Release Tracking Number: 3 - 23606

ONLY COMPLETE ONE COPY OF THIS PAGE AND ATTACH TO THE FINAL COPY OF THE SUMMARY SHEET.

L. ACKNOWLEDGMENT OF RECEIPT OF REMEDIATION WASTE AT RECEIVING FACILITY OR TEMPORARY STORAGE:

Receiving Facility/Temporary Storage Representative (print): John J. Doherty Title: LEO

Signature: John J. Doherty Date: 8-31-09

M. ACKNOWLEDGMENT OF SHIPMENT AND RECEIPT OF REMEDIATION WASTE BY PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH THIS BILL OF LADING:

I certify under penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in herein is, to the best of my knowledge and belief, true accurate and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

Signature: _____ Date: _____

Name of Person (print): Mark Coppola

AGGREGATE RECYCLING CORP
434 DOW HIGHWAY
PO BOX 363
ELIOT,ME 03903

Ticket No # 90756
Date :08/31/2009
Phone :(207)439-5584
Fax :(207)439-5586

Customer:29-08-09
WORLD 115 NOMINEE TRUST
PO BOX 95025

NEWTON MA,02495

REM 54

SOIL SOIL

Gross: 66520 lb Scale In 10:12
Tare: 37540 lb Scale Out 10:24
Net: 28980 lb
14.490 tn

Weigh Master: ROD

Driver:

Remarks:

Material $	0.00
Delivery $	0.00
Misc $	0.00
Tax $	0.00
Total $	0.

File Copy original mailed to Duncan on 9-14-09.

Cycle Chem

The Environmental Services Source

Date 09/21/10

DISCREPANCY NOTICE

Customer:	GENERAL CHEMICAL 133-138 LELAND ST. FRAMINGHAM MA (wsd)	Work Order:	112888
Generator:	WORLD 115 NOMINEE TRUST 515 SOMERVILLE AVENUE SOMERVILLE MA (967004)	Date Received:	09/09/10

Quality Control procedures performed on the above referenced waste shipment have revealed the following discrepancies with either the acceptance criteria or the Material Profile Sheet that require changing the disposal treatment or the cost.

OFF SPEC

RESPONSE REQUESTED

Waste Name:	GASOLINE		Manifest:	005881042JJK		Line Item:	Page 1 Line 1
Product Code	Price	New Product Code	New Price	Drum Size	Cost Increase	Quantity	Total
IK	[redacted]		TBD	55-G DM	TBD	2	TBD

Discrepancy: Material was not profiled as containing PCBs, but when a sample is analyzed in the laboratory, it was found to contain 11.4ppm PCBs, 9.8ppm PCB's .

PLEASE CHOOSE:

A: Material is NOT regulated by TSCA

B: Material is TSCA regulated $ TBD

Waste Name:	STODDARD SOLVENT	Manifest:	005661042JJK	Line Item:	Page 1 Line 3

Product Code	Price	New Product Code	New Price	Drum Size	Cost Increase	Quantity	Total
IK	[redacted]		TBD	55 G DM	TBD	1	TBD

Discrepancy: Material was not profiled as containing PCBs, but when a sample is analyzed in the laboratory, it was found to contain 18.3ppm PCBs,

PLEASE CHOOSE:

(A: Material is NOT regulated by TSCA)

B: Material is TSCA regulated $TBD

Waste Name:	STODDARD SOLVENT	Manifest:	005661042JJK	Line Item:	Page 1 Line 3

Product Code	Price	New Product Code	New Price	Drum Size	Cost Increase	Quantity	Total
IK	[redacted]	PCBT1	[redacted]	55 G DM	[redacted]	1	[redacted]

Discrepancy: Material was not profiled as containing PCBs, but when a sample is analyzed in the laboratory, it was found to contain 266.2ppm PCBs.

PLEASE CHOOSE:

A: Material is NOT regulated by TSCA

(B: Material is TSCA regulated.) ONLY BECAUSE OF PCB CONCENTRATION. 750 ppm

Total Cost Increase: [redacted] TBD

Cycle Chem will process all referenced waste streams and invoice for the listed charges. If no response is received in twenty-four hours. Please authorize the above changes by signing below and faxing back to 908 355 0965 or 0982

Mark J. Cyr — LIBERTY NAVIGATION TRUST — 9/22/2010

Name — Company — Date

BASED ON THE ABSENCE OF OTHER THAN TRACE CONCENTRATIONS OF PCB IN ANY SOURCE MATERIALS TESTED AND THE ABSENCE OF PROCESSES AT THE FACILITY INVOLVING PCBs, TSCA REGULATION DOES NOT APPEAR TO BE APPLICABLE. VARIABILITY IN PCB CONTENT OVER MORE THAN AN ORDER OF MAGNITUDE SUGGESTS THE PCB CONTENT WAS DUE TO CONTRACTOR-PROVIDED CONTAMINATED DRUMS.

APPENDIX C

LABORATORY ANALYTICAL REPORTS

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006

CERTIFICATE OF ANALYSIS

Client: Rizzo Associates

Address: 235 West Central Street
Natick, MA 01760

Attn: Cheryl A. Place

Project Number: 2428-01

Site: Solomon

Laboratory Job Number: 9207615

Invoice Number: 30606

Date Received: 26-OCT-92

Date Reported: 09-NOV-92

Delivery Method: Alpha

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
9207615-01	JSS-RZ3-SS6-301	Somerville
9207615-02	JSS-SB1-SS-302	Somerville
9207615-03	JSS-SB1-SS-303	Somerville
9207615-04	JSS-RZ2-GW-401	Somerville
9207615-05	JSS-RZ2-GW-402	Somerville
9207615-06	JSS-RZ3-GW-403	Somerville
9207615-07	JSS-RZ1-GW-404	Somerville
9207615-08	TRIP BLANK	Somerville

Authorized by:

Scott McLean - Laboratory Director

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ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006

Laboratory Sample Number: 9207615-01
JSS-RZ3-SS6-301
Sample Matrix: SOIL
Condition of Sample: Satisfactory
Number & Type of Containers: 4 Glass,1 Vial

Date Received: 26-OCT-92
Date Reported: 09-NOV-92
Field Prep: None

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Solids, Total	89	%	.1	3	2540B		31-Oct
Cyanide, Total	ND	mg/kg	.25	1	9010		05-Nov
Hydrocarbons, Total	82	mg/kg	40	1	9073	30-Oct	31-Oct
Total Metals				1	3005/3050		
Antimony, Total	ND	mg/kg	100	1	6010	27-Oct	28-Oct
Arsenic, Total	1.8	mg/kg	1	1	7060	27-Oct	29-Oct
Barium, Total	52.7	mg/kg	10	1	6010	27-Oct	28-Oct
Beryllium, Total	ND	mg/kg	2	1	6010	27-Oct	28-Oct
Cadmium, Total	ND	mg/kg	2	1	6010	27-Oct	28-Oct
Chromium, Total	6.6	mg/kg	4	1	6010	27-Oct	28-Oct
Copper, Total	6.6	mg/kg	4	1	6010	27-Oct	28-Oct
Lead, Total	61.4	mg/kg	10	1	6010	27-Oct	28-Oct
Mercury, Total	ND	mg/kg	.25	1	7470/7471	02-Nov	02-Nov
Nickel, Total	ND	mg/kg	10	1	6010	27-Oct	28-Oct
Selenium, Total	ND	mg/kg	1	1	7740	27-Oct	29-Oct
Silver, Total	ND	mg/kg	2	1	6010	27-Oct	28-Oct
Thallium, Total	ND	mg/kg	1	1	7841	27-Oct	29-Oct
Zinc, Total	41.7	mg/kg	2	1	6010	27-Oct	28-Oct
Polychlorinated Biphenyls				1	8080	27-Oct	02-NOV
Arochlor 1221	ND	ug/kg	250				
Arochlor 1232	ND	ug/kg	250				
Arochlor 1242/PCB 1016	ND	ug/kg	250				
Arochlor 1248	ND	ug/kg	250				
Arochlor 1254	ND	ug/kg	250				
Arochlor 1260	ND	ug/kg	250				
Arochlor 1262	ND	ug/kg	250				
Arochlor 1268	ND	ug/kg	250				
SURROGATE RECOVERY							
Dibutylchlorendate	100	%					

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: 9207615-01

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSI:
Volatile Organics by GC/MS				1	8260		06-NO
Methylene chloride	ND	ug/kg	25				
1,1-Dichloroethane	ND	ug/kg	7.5				
Chloroform	ND	ug/kg	7.5				
Carbon tetrachloride	ND	ug/kg	5				
1,2-Dichloropropane	ND	ug/kg	17.5				
Dibromochloromethane	ND	ug/kg	5				
1,1,2-Trichloroethane	ND	ug/kg	7.5				
2-Chloroethylvinyl ether	ND	ug/kg	50				
Tetrachloroethene	ND	ug/kg	7.5				
Chlorobenzene	ND	ug/kg	17.5				
Trichlorofluoromethane	ND	ug/kg	25				
1,2-Dichloroethane	ND	ug/kg	7.5				
1,1,1-Trichloroethane	ND	ug/kg	5				
Bromodichloromethane	ND	ug/kg	5				
trans-1,3-Dichloropropene	ND	ug/kg	7.5				
cis-1,3-Dichloropropene	ND	ug/kg	5				
Bromoform	ND	ug/kg	5				
1,1,2,2-Tetrachloroethane	ND	ug/kg	5				
Benzene	ND	ug/kg	5				
Toluene	ND	ug/kg	7.5				
Ethylbenzene	ND	ug/kg	5				
Chloromethane	ND	ug/kg	50				
Methyl bromide	ND	ug/kg	10				
Vinyl chloride	ND	ug/kg	17.5				
Chloroethane	ND	ug/kg	10				
1,1-Dichloroethene	ND	ug/kg	7.5				
trans-1,2-Dichloroethene	ND	ug/kg	7.5				
Trichloroethene	ND	ug/kg	5				
1,2-Dichlorobenzene	ND	ug/kg	50				
1,3-Dichlorobenzene	ND	ug/kg	50				
1,4-Dichlorobenzene	ND	ug/kg	50				
Methyl tert butyl ether	ND	ug/kg	50				
Xylenes	ND	ug/kg	5				
cis-1,2-Dichloroethene	ND	ug/kg	5				
Dibromomethane	ND	ug/kg	50				
1,4-Dichloro-2-butane	ND	ug/kg	50				
Ethanol	ND	ug/kg	125				
Iodomethane	ND	ug/kg	50				
1,2,3-Trichloropropane	ND	ug/kg	50				
Styrene	ND	ug/kg	5				
Dichlorodifluoromethane	ND	ug/kg	50				
Acetone	ND	ug/kg	50				
Carbon disulfide	ND	ug/kg	50				
2-Butanone	ND	ug/kg	22.5				
Vinyl acetate	ND	ug/kg	50				
4-Methyl-2-pentanone	ND	ug/kg	50				
2-Hexanone	ND	ug/kg	50				
Ethyl methacrylate	ND	ug/kg	50				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: 9207615-01

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS continued				1	8260		06-NOV
Acrolein	ND	ug/kg	125				
Acrylonitrile	ND	ug/kg	50				
SURROGATE RECOVERY							
1,2-Dichloroethane-d4	102	%					
Toluene-d8	95	%					
4-Bromofluorobenzene	100	%					

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: 9207615-01

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	ANALYSI:
Semi-volatile Organics by GC/MS				1	8270		27-OC
Acenaphthene	ND	ug/kg	145				
Benzidine	ND	ug/kg	1220				
1,2,4-Trichlorobenzene	ND	ug/kg	175				
Hexachlorobenzene	ND	ug/kg	145				
Bis(2-chloroethyl)ether	ND	ug/kg	150				
2-Chloronaphthalene	ND	ug/kg	150				
1,2-Dichlorobenzene	ND	ug/kg	140				
1,3-Dichlorobenzene	ND	ug/kg	165				
1,4-Dichlorobenzene	ND	ug/kg	115				
3,3'-Dichlorobenzidine	ND	ug/kg	325				
2,4-Dinitrotoluene	ND	ug/kg	185				
2,6-Dinitrotoluene	ND	ug/kg	140				
Azobenzene	ND	ug/kg	135				
Fluoranthene	153	ug/kg	145				
4-Chlorophenyl phenyl ether	ND	ug/kg	150				
4-Bromophenyl phenyl ether	ND	ug/kg	140				
Bis(2-chloroisopropyl)ether	ND	ug/kg	100				
Bis(2-chloroethoxy)methane	ND	ug/kg	110				
Hexachlorobutadiene	ND	ug/kg	400				
Hexachlorocyclopentadiene	ND	ug/kg	375				
Hexachloroethane	ND	ug/kg	250				
Isophorone	ND	ug/kg	120				
Naphthalene	ND	ug/kg	110				
Nitrobenzene	ND	ug/kg	95				
n-Nitrosodiphenylamine	ND	ug/kg	125				
n-Nitrosodi-n-propylamine	ND	ug/kg	130				
Bis(2-ethylhexyl)phthalate	ND	ug/kg	455				
Butyl benzyl phthalate	ND	ug/kg	100				
Di-n-butylphthalate	ND	ug/kg	135				
Di-n-octylphthalate	ND	ug/kg	120				
Diethyl phthalate	ND	ug/kg	250				
Dimethyl phthalate	ND	ug/kg	250				
Benzo(a)anthracene	ND	ug/kg	155				
Benzo(a)pyrene	ND	ug/kg	190				
Benzo(b,k)fluoranthene	ND	ug/kg	175				
Chrysene	ND	ug/kg	155				
Acenaphthylene	ND	ug/kg	130				
Anthracene	ND	ug/kg	125				
Benzo(ghi)perylene	ND	ug/kg	250				
Fluorene	ND	ug/kg	135				
Phenanthrene	ND	ug/kg	130				
Dibenzo(a,h)anthracene	ND	ug/kg	245				
Indeno(1,2,3-cd)pyrene	ND	ug/kg	235				
Pyrene	ND	ug/kg	140				
Aniline	ND	ug/kg	500				
4-Chloroaniline	ND	ug/kg	200				
1-Methylnaphthalene	ND	ug/kg	350				
2-Nitroaniline	ND	ug/kg	160				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: 9207615-01

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Semi-volatile Organics by GC/MS continued				1	8270		27-OCT
3-Nitroaniline	ND	ug/kg	300				
4-Nitroaniline	ND	ug/kg	290				
Dibenzofuran	ND	ug/kg	100				
a,a-Dimethylphenethylamine	ND	ug/kg	2250				
Hexachloropropene	ND	ug/kg	1000				
Nitrosodi-n-butylamine	ND	ug/kg	245				
2-Methylnaphthalene	ND	ug/kg	90				
Tetrachlorobenzene	ND	ug/kg	620				
Pentachlorobenzene	ND	ug/kg	640				
a-Naphthalamine	ND	ug/kg	1000				
b-Naphthalamine	ND	ug/kg	465				
Diphenylamine	ND	ug/kg	205				
Acetophenetidide	ND	ug/kg	500				
Dimethoate	ND	ug/kg	1000				
4-Aminobiphenyl	ND	ug/kg	515				
Pentachloronitrobenzene	ND	ug/kg	195				
Isodrin	ND	ug/kg	190				
p-Dimethylaminoazobenzene	ND	ug/kg	355				
Chlorobenzilate	ND	ug/kg	800				
Bis(2-ethylhexyl)adipate	ND	ug/kg	165				
3-Methylcholanthrene	ND	ug/kg	1000				
Ethylmethanesulfonate	ND	ug/kg	730				
Acetophenone	ND	ug/kg	235				
Nitrosodipiperidine	ND	ug/kg	1000				
7,12-Dimethylbenz(a)anthracene	ND	ug/kg	1215				
n-Nitrosodimethylamine	ND	ug/kg	2000				
2,4,6-Trichlorophenol	ND	ug/kg	105				
p-Chloro-m-cresol	ND	ug/kg	150				
2-Chlorophenol	ND	ug/kg	165				
2,4-Dichlorophenol	ND	ug/kg	500				
2,4-Dimethylphenol	ND	ug/kg	115				
2-Nitrophenol	ND	ug/kg	160				
4-Nitrophenol	ND	ug/kg	6000				
2,4-Dinitrophenol	ND	ug/kg	750				
4,6-Dinitro-o-cresol	ND	ug/kg	870				
Pentachlorophenol	ND	ug/kg	350				
Phenol	ND	ug/kg	415				
Cresol, Total	ND	ug/kg	360				
2,4,5-Trichlorophenol	ND	ug/kg	135				
2,6-Dichlorophenol	ND	ug/kg	235				
Benzoic Acid	ND	ug/kg	2000				
Benzyl Alcohol	ND	ug/kg	290				
SURROGATE RECOVERY							
2-Fluorophenol	70	%					
Phenol-d6	78	%					
Nitrobenzene-d5	98	%					

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: 9207615-01

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	ANALYSI:
Semi-volatile Organics by GC/MS continued				1	8270		27-OC
2-Fluorobiphenyl	104	%					
2,4,6-Tribromophenol	80	%					
4-Terphenyl-d14	102	%					
Organochlorine Pesticides				1	8080	27-Oct	02-NOV
Delta-BHC	ND	ug/l	.2				
Lindane	ND	ug/l	.2				
Alpha-BHC	ND	ug/l	.2				
Beta-BHC	ND	ug/l	.2				
Heptachlor	ND	ug/l	.2				
Alachlor	ND	ug/l	.2				
Atrazine	ND	ug/l	.2				
Aldrin	ND	ug/l	.2				
Heptachlor epoxide	ND	ug/l	.2				
Endrin	ND	ug/l	.2				
Endrin aldehyde	ND	ug/l	.2				
Endrin ketone	ND	ug/l	.2				
Dieldrin	ND	ug/l	.2				
4,4'-DDE	ND	ug/l	.2				
4,4'-DDD	ND	ug/l	.2				
4,4'-DDT	ND	ug/l	.2				
Endosulfan I	ND	ug/l	.2				
Endosulfan II	ND	ug/l	.2				
Endosulfan sulfate	ND	ug/l	.2				
Methoxychlor	ND	ug/l	.2				
Chlordane	ND	ug/l	.2				
Toxaphene	ND	ug/l	.2				
SURROGATE RECOVERY							
Dibutylchlorendate	100	%					

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006

Laboratory Sample Number: 9207615-02
JSS-SB1-SS-302
Sample Matrix: SOIL
Condition of Sample: Satisfactory
Number & Type of Containers: 4 Glass,1 Vial

Date Received: 26-OCT-92
Date Reported: 09-NOV-92
Field Prep: None

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Solids, Total	93	%	.1	3	2540B		31-Oct
Cyanide, Total	ND	mg/kg	.25	1	9010		05-Nov
Hydrocarbons, Total	56	mg/kg	40	1	9073	30-Oct	31-Oct
Total Metals				1	3005/3050		
Antimony, Total	ND	mg/kg	100	1	6010	27-Oct	28-Oct
Arsenic, Total	3.1	mg/kg	1	1	7060	27-Oct	29-Oct
Barium, Total	18.7	mg/kg	10	1	6010	27-Oct	28-Oct
Beryllium, Total	ND	mg/kg	2	1	6010	27-Oct	28-Oct
Cadmium, Total	ND	mg/kg	2	1	6010	27-Oct	28-Oct
Chromium, Total	10.4	mg/kg	4	1	6010	27-Oct	28-Oct
Copper, Total	8.3	mg/kg	4	1	6010	27-Oct	28-Oct
Lead, Total	14.6	mg/kg	10	1	6010	27-Oct	28-Oct
Mercury, Total	ND	mg/kg	.25	1	7470/7471	02-Nov	02-Nov
Nickel, Total	ND	mg/kg	10	1	6010	27-Oct	28-Oct
Selenium, Total	ND	mg/kg	1	1	7740	27-Oct	29-Oct
Silver, Total	ND	mg/kg	2	1	6010	27-Oct	28-Oct
Thallium, Total	ND	mg/kg	1	1	7841	27-Oct	29-Oct
Zinc, Total	25	mg/kg	2	1	6010	27-Oct	28-Oct
Polychlorinated Biphenyls				1	8080	27-Oct	02-NOV
Arochlor 1221	ND	ug/kg	250				
Arochlor 1232	ND	ug/kg	250				
Arochlor 1242/PCB 1016	ND	ug/kg	250				
Arochlor 1248	ND	ug/kg	250				
Arochlor 1254	ND	ug/kg	250				
Arochlor 1260	ND	ug/kg	250				
Arochlor 1262	ND	ug/kg	250				
Arochlor 1268	ND	ug/kg	250				
SURROGATE RECOVERY							
Dibutylchlorendate	38	%					

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: 9207615-02

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSI:
Volatile Organics by GC/MS				1	8260		06-NOV
Methylene chloride	ND	ug/kg	25				
1,1-Dichloroethane	ND	ug/kg	7.5				
Chloroform	ND	ug/kg	7.5				
Carbon tetrachloride	ND	ug/kg	5				
1,2-Dichloropropane	ND	ug/kg	17.5				
Dibromochloromethane	ND	ug/kg	5				
1,1,2-Trichloroethane	ND	ug/kg	7.5				
2-Chloroethylvinyl ether	ND	ug/kg	50				
Tetrachloroethene	ND	ug/kg	7.5				
Chlorobenzene	ND	ug/kg	17.5				
Trichlorofluoromethane	ND	ug/kg	25				
1,2-Dichloroethane	ND	ug/kg	7.5				
1,1,1-Trichloroethane	ND	ug/kg	5				
Bromodichloromethane	ND	ug/kg	5				
trans-1,3-Dichloropropene	ND	ug/kg	7.5				
cis-1,3-Dichloropropene	ND	ug/kg	5				
Bromoform	ND	ug/kg	5				
1,1,2,2-Tetrachloroethane	ND	ug/kg	5				
Benzene	ND	ug/kg	5				
Toluene	ND	ug/kg	7.5				
Ethylbenzene	ND	ug/kg	5				
Chloromethane	ND	ug/kg	50				
Methyl bromide	ND	ug/kg	10				
Vinyl chloride	ND	ug/kg	17.5				
Chloroethane	ND	ug/kg	10				
1,1-Dichloroethene	ND	ug/kg	7.5				
trans-1,2-Dichloroethene	ND	ug/kg	7.5				
Trichloroethene	ND	ug/kg	5				
1,2-Dichlorobenzene	ND	ug/kg	50				
1,3-Dichlorobenzene	ND	ug/kg	50				
1,4-Dichlorobenzene	ND	ug/kg	50				
Methyl tert butyl ether	ND	ug/kg	50				
Xylenes	ND	ug/kg	5				
cis-1,2-Dichloroethene	ND	ug/kg	5				
Dibromomethane	ND	ug/kg	50				
1,4-Dichloro-2-butane	ND	ug/kg	50				
Ethanol	ND	ug/kg	125				
Iodomethane	ND	ug/kg	50				
1,2,3-Trichloropropane	ND	ug/kg	50				
Styrene	ND	ug/kg	5				
Dichlorodifluoromethane	ND	ug/kg	50				
Acetone	ND	ug/kg	50				
Carbon disulfide	ND	ug/kg	50				
2-Butanone	ND	ug/kg	22.5				
Vinyl acetate	ND	ug/kg	50				
4-Methyl-2-pentanone	ND	ug/kg	50				
2-Hexanone	ND	ug/kg	50				
Ethyl methacrylate	ND	ug/kg	50				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: 9207615-02

PARAMETER	RESULT	UNITS	RDL	REP	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS continued				1	8260		06-NOV
Acrolein	ND	ug/kg	125				
Acrylonitrile	ND	ug/kg	50				
SURROGATE RECOVERY							
1,2-Dichloroethane-d4	101	%					
Toluene-d8	97	%					
4-Bromofluorobenzene	95	%					

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: 9207615-02

PARAMETER	RESULT	UNITS	RDL	REP	METHOD	DATES PREP	DATES ANALYSI
Semi-volatile Organics by GC/MS				1	8270		27-OC
Acenaphthene	ND	ug/kg	290				
Benzidine	ND	ug/kg	2440				
1,2,4-Trichlorobenzene	ND	ug/kg	350				
Hexachlorobenzene	ND	ug/kg	290				
Bis(2-chloroethyl)ether	ND	ug/kg	300				
2-Chloronaphthalene	ND	ug/kg	300				
1,2-Dichlorobenzene	ND	ug/kg	280				
1,3-Dichlorobenzene	ND	ug/kg	330				
1,4-Dichlorobenzene	ND	ug/kg	230				
3,3'-Dichlorobenzidine	ND	ug/kg	650				
2,4-Dinitrotoluene	ND	ug/kg	370				
2,6-Dinitrotoluene	ND	ug/kg	280				
Azobenzene	ND	ug/kg	270				
Fluoranthene	ND	ug/kg	290				
4-Chlorophenyl phenyl ether	ND	ug/kg	300				
4-Bromophenyl phenyl ether	ND	ug/kg	280				
Bis(2-chloroisopropyl)ether	ND	ug/kg	200				
Bis(2-chloroethoxy)methane	ND	ug/kg	220				
Hexachlorobutadiene	ND	ug/kg	800				
Hexachlorocyclopentadiene	ND	ug/kg	750				
Hexachloroethane	ND	ug/kg	500				
Isophorone	ND	ug/kg	240				
Naphthalene	ND	ug/kg	220				
Nitrobenzene	ND	ug/kg	190				
n-Nitrosodiphenylamine	ND	ug/kg	250				
n-Nitrosodi-n-propylamine	ND	ug/kg	260				
Bis(2-ethylhexyl)phthalate	ND	ug/kg	910				
Butyl benzyl phthalate	ND	ug/kg	200				
Di-n-butylphthalate	ND	ug/kg	270				
Di-n-octylphthalate	ND	ug/kg	240				
Diethyl phthalate	ND	ug/kg	500				
Dimethyl phthalate	ND	ug/kg	500				
Benzo(a)anthracene	ND	ug/kg	310				
Benzo(a)pyrene	ND	ug/kg	380				
Benzo(b,k)fluoranthene	ND	ug/kg	350				
Chrysene	ND	ug/kg	310				
Acenaphthylene	ND	ug/kg	260				
Anthracene	ND	ug/kg	250				
Benzo(ghi)perylene	ND	ug/kg	500				
Fluorene	ND	ug/kg	270				
Phenanthrene	ND	ug/kg	260				
Dibenzo(a,h)anthracene	ND	ug/kg	490				
Indeno(1,2,3-cd)pyrene	ND	ug/kg	470				
Pyrene	ND	ug/kg	280				
Aniline	ND	ug/kg	1000				
4-Chloroaniline	ND	ug/kg	400				
1-Methylnaphthalene	ND	ug/kg	700				
2-Nitroaniline	ND	ug/kg	320				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: 9207615-02

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Semi-volatile Organics by GC/MS continued				1	8270		27-OCT
3-Nitroaniline	ND	ug/kg	600				
4-Nitroaniline	ND	ug/kg	580				
Dibenzofuran	ND	ug/kg	200				
a,a-Dimethylphenethylamine	ND	ug/kg	4500				
Hexachloropropene	ND	ug/kg	2000				
Nitrosodi-n-butylamine	ND	ug/kg	490				
2-Methylnaphthalene	ND	ug/kg	180				
Tetrachlorobenzene	ND	ug/kg	1240				
Pentachlorobenzene	ND	ug/kg	1280				
a-Naphthalamine	ND	ug/kg	2000				
b-Naphthalamine	ND	ug/kg	930				
Diphenylamine	ND	ug/kg	410				
Acetophenetidide	ND	ug/kg	1000				
Dimethoate	ND	ug/kg	2000				
4-Aminobiphenyl	ND	ug/kg	1030				
Pentachloronitrobenzene	ND	ug/kg	390				
Isodrin	ND	ug/kg	380				
p-Dimethylaminoazobenzene	ND	ug/kg	710				
Chlorobenzilate	ND	ug/kg	1600				
Bis(2-ethylhexyl)adipate	ND	ug/kg	330				
3-Methylcholanthrene	ND	ug/kg	2000				
Ethylmethanesulfonate	ND	ug/kg	1460				
Acetophenone	ND	ug/kg	470				
Nitrosodipiperidine	ND	ug/kg	2000				
7,12-Dimethylbenz(a)anthracene	ND	ug/kg	2430				
n-Nitrosodimethylamine	ND	ug/kg	4000				
2,4,6-Trichlorophenol	ND	ug/kg	210				
p-Chloro-m-cresol	ND	ug/kg	300				
2-Chlorophenol	ND	ug/kg	330				
2,4-Dichlorophenol	ND	ug/kg	1000				
2,4-Dimethylphenol	ND	ug/kg	230				
2-Nitrophenol	ND	ug/kg	320				
4-Nitrophenol	ND	ug/kg	12000				
2,4-Dinitrophenol	ND	ug/kg	1500				
4,6-Dinitro-o-cresol	ND	ug/kg	1740				
Pentachlorophenol	ND	ug/kg	700				
Phenol	ND	ug/kg	830				
Cresol, Total	ND	ug/kg	720				
2,4,5-Trichlorophenol	ND	ug/kg	270				
2,6-Dichlorophenol	ND	ug/kg	470				
Benzoic Acid	ND	ug/kg	4000				
Benzyl Alcohol	ND	ug/kg	580				
SURROGATE RECOVERY							
2-Fluorophenol	51	%					
Phenol-d6	62	%					
Nitrobenzene-d5	88	%					

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: 9207615-02

PARAMETER	RESULT	UNITS	RDL	REP	METHOD	DATES PREP	DATES ANALYSI
Semi-volatile Organics by GC/MS continued				1	8270		27-OC
2-Fluorobiphenyl	100	%					
2,4,6-Tribromophenol	83	%					
4-Terphenyl-d14	114	%					
Organochlorine Pesticides				1	8080	27-Oct	02-OCT
Delta-BHC	ND	ug/l	.2				
Lindane	ND	ug/l	.2				
Alpha-BHC	ND	ug/l	.2				
Beta-BHC	ND	ug/l	.2				
Heptachlor	ND	ug/l	.2				
Alachlor	ND	ug/l	.2				
Atrazine	ND	ug/l	.2				
Aldrin	ND	ug/l	.2				
Heptachlor epoxide	ND	ug/l	.2				
Endrin	ND	ug/l	.2				
Endrin aldehyde	ND	ug/l	.2				
Endrin ketone	ND	ug/l	.2				
Dieldrin	ND	ug/l	.2				
4,4'-DDE	ND	ug/l	.2				
4,4'-DDD	ND	ug/l	.2				
4,4'-DDT	ND	ug/l	.2				
Endosulfan I	ND	ug/l	.2				
Endosulfan II	ND	ug/l	.2				
Endosulfan sulfate	ND	ug/l	.2				
Methoxychlor	ND	ug/l	.2				
Chlordane	ND	ug/l	.2				
Toxaphene	ND	ug/l	.2				
SURROGATE RECOVERY							
Dibutylchlorendate	38	%					

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006

Laboratory Sample Number: 9207615-03
JSS-SB1-SS-303
Date Received: 26-OCT-92

Sample Matrix: SOIL
Date Reported: 09-NOV-92

Condition of Sample: Satisfactory
Field Prep: None

Number & Type of Containers: 4 Glass,1 Vial

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Solids, Total	96	%	.1	3	2540B		31-Oct
Cyanide, Total	ND	mg/kg	.25	1	9010		05-Nov
Hydrocarbons, Total	2920	mg/kg	40	1	9073	30-Oct	31-Oct
Total Metals				1	3005/3050		
Antimony, Total	ND	mg/kg	100	1	6010	27-Oct	28-Oct
Arsenic, Total	4.7	mg/kg	1	1	7060	27-Oct	29-Oct
Barium, Total	20.3	mg/kg	10	1	6010	27-Oct	28-Oct
Beryllium, Total	ND	mg/kg	2	1	6010	27-Oct	28-Oct
Cadmium, Total	ND	mg/kg	2	1	6010	27-Oct	28-Oct
Chromium, Total	24.4	mg/kg	4	1	6010	27-Oct	28-Oct
Copper, Total	8.1	mg/kg	4	1	6010	27-Oct	28-Oct
Lead, Total	14.2	mg/kg	10	1	6010	27-Oct	28-Oct
Mercury, Total	ND	mg/kg	.25	1	7470/7471	02-Nov	02-Nov
Nickel, Total	18.3	mg/kg	10	1	6010	27-Oct	28-Oct
Selenium, Total	ND	mg/kg	1	1	7740	27-Oct	29-Oct
Silver, Total	ND	mg/kg	2	1	6010	27-Oct	28-Oct
Thallium, Total	ND	mg/kg	1	1	7841	27-Oct	29-Oct
Zinc, Total	24.4	mg/kg	2	1	6010	27-Oct	28-Oct
Polychlorinated Biphenyls				1	8080	27-Oct	02-NOV
Arochlor 1221	ND	ug/kg	250				
Arochlor 1232	ND	ug/kg	250				
Arochlor 1242/PCB 1016	ND	ug/kg	250				
Arochlor 1248	ND	ug/kg	250				
Arochlor 1254	ND	ug/kg	250				
Arochlor 1260	ND	ug/kg	250				
Arochlor 1262	ND	ug/kg	250				
Arochlor 1268	ND	ug/kg	250				
SURROGATE RECOVERY							
Dibutylchlorendate	121	%					

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: 9207615-03

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSI:
Volatile Organics by GC/MS				1	8260		06-NO
Methylene chloride	ND	ug/kg	25				
1,1-Dichloroethane	ND	ug/kg	7.5				
Chloroform	ND	ug/kg	7.5				
Carbon tetrachloride	ND	ug/kg	5				
1,2-Dichloropropane	ND	ug/kg	17.5				
Dibromochloromethane	ND	ug/kg	5				
1,1,2-Trichloroethane	ND	ug/kg	7.5				
2-Chloroethylvinyl ether	ND	ug/kg	50				
Tetrachloroethene	ND	ug/kg	7.5				
Chlorobenzene	ND	ug/kg	17.5				
Trichlorofluoromethane	ND	ug/kg	25				
1,2-Dichloroethane	ND	ug/kg	7.5				
1,1,1-Trichloroethane	ND	ug/kg	5				
Bromodichloromethane	ND	ug/kg	5				
trans-1,3-Dichloropropene	ND	ug/kg	7.5				
cis-1,3-Dichloropropene	ND	ug/kg	5				
Bromoform	ND	ug/kg	5				
1,1,2,2-Tetrachloroethane	ND	ug/kg	5				
Benzene	ND	ug/kg	5				
Toluene	ND	ug/kg	7.5				
Ethylbenzene	ND	ug/kg	5				
Chloromethane	ND	ug/kg	50				
Methyl bromide	ND	ug/kg	10				
Vinyl chloride	ND	ug/kg	17.5				
Chloroethane	ND	ug/kg	10				
1,1-Dichloroethene	ND	ug/kg	7.5				
trans-1,2-Dichloroethene	ND	ug/kg	7.5				
Trichloroethene	ND	ug/kg	5				
1,2-Dichlorobenzene	ND	ug/kg	50				
1,3-Dichlorobenzene	ND	ug/kg	50				
1,4-Dichlorobenzene	ND	ug/kg	50				
Methyl tert butyl ether	ND	ug/kg	50				
Xylenes	ND	ug/kg	5				
cis-1,2-Dichloroethene	ND	ug/kg	5				
Dibromomethane	ND	ug/kg	50				
1,4-Dichloro-2-butane	ND	ug/kg	50				
Ethanol	ND	ug/kg	125				
Iodomethane	ND	ug/kg	50				
1,2,3-Trichloropropane	ND	ug/kg	50				
Styrene	ND	ug/kg	5				
Dichlorodifluoromethane	ND	ug/kg	50				
Acetone	ND	ug/kg	50				
Carbon disulfide	ND	ug/kg	50				
2-Butanone	ND	ug/kg	22.5				
Vinyl acetate	ND	ug/kg	50				
4-Methyl-2-pentanone	ND	ug/kg	50				
2-Hexanone	ND	ug/kg	50				
Ethyl methacrylate	ND	ug/kg	50				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: 9207615-03

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS continued				1	8260		06-NOV
Acrolein	ND	ug/kg	125				
Acrylonitrile	ND	ug/kg	50				
SURROGATE RECOVERY							
1,2-Dichloroethane-d4	95	%					
Toluene-d8	96	%					
4-Bromofluorobenzene	96	%					

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: 9207615-03

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSI
Semi-volatile Organics by GC/MS				1	8270		27-OC
Acenaphthene	ND	ug/kg	725				
Benzidine	ND	ug/kg	6100				
1,2,4-Trichlorobenzene	ND	ug/kg	875				
Hexachlorobenzene	ND	ug/kg	725				
Bis(2-chloroethyl)ether	ND	ug/kg	750				
2-Chloronaphthalene	ND	ug/kg	750				
1,2-Dichlorobenzene	ND	ug/kg	700				
1,3-Dichlorobenzene	ND	ug/kg	825				
1,4-Dichlorobenzene	ND	ug/kg	575				
3,3'-Dichlorobenzidine	ND	ug/kg	1625				
2,4-Dinitrotoluene	ND	ug/kg	925				
2,6-Dinitrotoluene	ND	ug/kg	700				
Azobenzene	ND	ug/kg	675				
Fluoranthene	ND	ug/kg	725				
4-Chlorophenyl phenyl ether	ND	ug/kg	750				
4-Bromophenyl phenyl ether	ND	ug/kg	700				
Bis(2-chloroisopropyl)ether	ND	ug/kg	500				
Bis(2-chloroethoxy)methane	ND	ug/kg	550				
Hexachlorobutadiene	ND	ug/kg	2000				
Hexachlorocyclopentadiene	ND	ug/kg	1875				
Hexachloroethane	ND	ug/kg	1250				
Isophorone	ND	ug/kg	600				
Naphthalene	ND	ug/kg	550				
Nitrobenzene	ND	ug/kg	475				
n-Nitrosodiphenylamine	ND	ug/kg	625				
n-Nitrosodi-n-propylamine	ND	ug/kg	650				
Bis(2-ethylhexyl)phthalate	ND	ug/kg	2275				
Butyl benzyl phthalate	ND	ug/kg	500				
Di-n-butylphthalate	ND	ug/kg	675				
Di-n-octylphthalate	ND	ug/kg	600				
Diethyl phthalate	ND	ug/kg	1250				
Dimethyl phthalate	ND	ug/kg	1250				
Benzo(a)anthracene	ND	ug/kg	775				
Benzo(a)pyrene	ND	ug/kg	950				
Benzo(b,k)fluoranthene	ND	ug/kg	875				
Chrysene	ND	ug/kg	775				
Acenaphthylene	ND	ug/kg	650				
Anthracene	ND	ug/kg	625				
Benzo(ghi)perylene	ND	ug/kg	1250				
Fluorene	ND	ug/kg	675				
Phenanthrene	ND	ug/kg	650				
Dibenzo(a,h)anthracene	ND	ug/kg	1225				
Indeno(1,2,3-cd)pyrene	ND	ug/kg	1175				
Pyrene	ND	ug/kg	700				
Aniline	ND	ug/kg	2500				
4-Chloroaniline	ND	ug/kg	1000				
1-Methylnaphthalene	ND	ug/kg	1750				
2-Nitroaniline	ND	ug/kg	800				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: 9207615-03

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Semi-volatile Organics by GC/MS continued				1	8270		27-OCT
3-Nitroaniline	ND	ug/kg	1500				
4-Nitroaniline	ND	ug/kg	1450				
Dibenzofuran	ND	ug/kg	500				
a,a-Dimethylphenethylamine	ND	ug/kg	11250				
Hexachloropropene	ND	ug/kg	5000				
Nitrosodi-n-butylamine	ND	ug/kg	1225				
2-Methylnaphthalene	ND	ug/kg	450				
Tetrachlorobenzene	ND	ug/kg	3100				
Pentachlorobenzene	ND	ug/kg	3200				
a-Naphthalamine	ND	ug/kg	5000				
b-Naphthalamine	ND	ug/kg	2325				
Diphenylamine	ND	ug/kg	1025				
Acetophenetidide	ND	ug/kg	2500				
Dimethoate	ND	ug/kg	5000				
4-Aminobiphenyl	ND	ug/kg	2575				
Pentachloronitrobenzene	ND	ug/kg	975				
Isodrin	ND	ug/kg	950				
p-Dimethylaminoazobenzene	ND	ug/kg	1775				
Chlorobenzilate	ND	ug/kg	4000				
Bis(2-ethylhexyl)adipate	ND	ug/kg	825				
3-Methylcholanthrene	ND	ug/kg	5000				
Ethylmethanesulfonate	ND	ug/kg	3650				
Acetophenone	ND	ug/kg	1175				
Nitrosodipiperidine	ND	ug/kg	5000				
7,12-Dimethylbenz(a)anthracene	ND	ug/kg	6075				
n-Nitrosodimethylamine	ND	ug/kg	10000				
2,4,6-Trichlorophenol	ND	ug/kg	525				
p-Chloro-m-cresol	ND	ug/kg	750				
2-Chlorophenol	ND	ug/kg	825				
2,4-Dichlorophenol	ND	ug/kg	2500				
2,4-Dimethylphenol	ND	ug/kg	575				
2-Nitrophenol	ND	ug/kg	800				
4-Nitrophenol	ND	ug/kg	30000				
2,4-Dinitrophenol	ND	ug/kg	3750				
4,6-Dinitro-o-cresol	ND	ug/kg	4350				
Pentachlorophenol	ND	ug/kg	1750				
Phenol	ND	ug/kg	2075				
Cresol, Total	ND	ug/kg	1800				
2,4,5-Trichlorophenol	ND	ug/kg	675				
2,6-Dichlorophenol	ND	ug/kg	1175				
Benzoic Acid	ND	ug/kg	10000				
Benzyl Alcohol	ND	ug/kg	1450				
SURROGATE RECOVERY							
2-Fluorophenol	58	%					
Phenol-d6	69	%					
Nitrobenzene-d5	93	%					

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: 9207615-03

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	ANALYSI
Semi-volatile Organics by GC/MS continued				1	8270		27-OCT
2-Fluorobiphenyl	104	%					
2,4,6-Tribromophenol	80	%					
4-Terphenyl-d14	120	%					
Organochlorine Pesticides				1	8080	27-Oct	02-NOV
Delta-BHC	ND	ug/l	.2				
Lindane	ND	ug/l	.2				
Alpha-BHC	ND	ug/l	.2				
Beta-BHC	ND	ug/l	.2				
Heptachlor	ND	ug/l	.2				
Alachlor	ND	ug/l	.2				
Atrazine	ND	ug/l	.2				
Aldrin	ND	ug/l	.2				
Heptachlor epoxide	ND	ug/l	.2				
Endrin	ND	ug/l	.2				
Endrin aldehyde	ND	ug/l	.2				
Endrin ketone	ND	ug/l	.2				
Dieldrin	ND	ug/l	.2				
4,4'-DDE	ND	ug/l	.2				
4,4'-DDD	ND	ug/l	.2				
4,4'-DDT	ND	ug/l	.2				
Endosulfan I	ND	ug/l	.2				
Endosulfan II	ND	ug/l	.2				
Endosulfan sulfate	ND	ug/l	.2				
Methoxychlor	ND	ug/l	.2				
Chlordane	ND	ug/l	.2				
Toxaphene	ND	ug/l	.2				
SURROGATE RECOVERY							
Dibutylchlorendate	121	%					

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006

Laboratory Sample Number: 9207615-04
JSS-RZ2-GW-401
Date Received: 26-OCT-92

Sample Matrix: WATER
Date Reported: 09-NOV-92

Condition of Sample: Satisfactory
Field Prep: None

Number & Type of Containers: 3 Amber Glass,2 Vial

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Hydrocarbons, Total	ND	mg/l	.5	1	9073	03-Nov	04-Nov
Volatile Organics by GC/MS				1	8260		05-NOV
Methylene chloride	ND	ug/l	5				
1,1-Dichloroethane	ND	ug/l	1.5				
Chloroform	ND	ug/l	1.5				
Carbon tetrachloride	ND	ug/l	1				
1,2-Dichloropropane	ND	ug/l	3.5				
Dibromochloromethane	ND	ug/l	1				
1,1,2-Trichloroethane	ND	ug/l	1.5				
2-Chloroethylvinyl ether	ND	ug/l	10				
Tetrachloroethene	ND	ug/l	1.5				
Chlorobenzene	ND	ug/l	3.5				
Trichlorofluoromethane	ND	ug/l	5				
1,2-Dichloroethane	ND	ug/l	1.5				
1,1,1-Trichloroethane	ND	ug/l	1				
Bromodichloromethane	ND	ug/l	1				
trans-1,3-Dichloropropene	ND	ug/l	1.5				
cis-1,3-Dichloropropene	ND	ug/l	1				
Bromoform	ND	ug/l	1				
1,1,2,2-Tetrachloroethane	ND	ug/l	1				
Benzene	ND	ug/l	1				
Toluene	13	ug/l	1.5				
Ethylbenzene	ND	ug/l	1				
Chloromethane	ND	ug/l	10				
Methyl bromide	ND	ug/l	2				
Vinyl chloride	ND	ug/l	3.5				
Chloroethane	ND	ug/l	2				
1,1-Dichloroethene	ND	ug/l	1.5				
trans-1,2-Dichloroethene	ND	ug/l	1.5				
Trichloroethene	ND	ug/l	1				
1,2-Dichlorobenzene	ND	ug/l	10				
1,3-Dichlorobenzene	ND	ug/l	10				
1,4-Dichlorobenzene	ND	ug/l	10				
Methyl tert butyl ether	ND	ug/l	10				
Xylenes	ND	ug/l	1				
cis-1,2-Dichloroethene	ND	ug/l	1				
Dibromomethane	ND	ug/l	10				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: 9207615-04

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSI.
Volatile Organics by GC/MS continued				1	8260		05-NOV
1,4-Dichloro-2-butane	ND	ug/l	10				
Ethanol	ND	ug/l	25				
Iodomethane	ND	ug/l	10				
1,2,3-Trichloropropane	ND	ug/l	10				
Styrene	ND	ug/l	1				
Dichlorodifluoromethane	ND	ug/l	10				
Acetone	ND	ug/l	10				
Carbon disulfide	ND	ug/l	10				
2-Butanone	ND	ug/l	4.5				
Vinyl acetate	ND	ug/l	10				
4-Methyl-2-pentanone	ND	ug/l	10				
2-Hexanone	ND	ug/l	10				
Ethyl methacrylate	ND	ug/l	10				
Acrolein	ND	ug/l	25				
Acrylonitrile	ND	ug/l	10				
SURROGATE RECOVERY							
1,2-Dichloroethane-d4	107	%					
Toluene-d8	100	%					
4-Bromofluorobenzene	86	%					
Hydrocarbon Scan GC 8100 Modified				1	8100M	29-Oct	03-NOV
Mineral Spirits	ND	mg/l	1				
Gasoline	ND	mg/l	1				
Fuel Oil #2	ND	mg/l	1				
Fuel Oil #4	ND	mg/l	1				
Fuel Oil #6	ND	mg/l	1				
Motor Oil	ND	mg/l	1				
Kerosene	ND	mg/l	1				
Diesel Fuel	ND	mg/l	1				
Naphthalene	ND	mg/l	1				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006

Laboratory Sample Number: 9207615-05 Date Received: 26-OCT-92
JSS-RZ2-GW-402
Sample Matrix: WATER Date Reported: 09-NOV-92

Condition of Sample: Satisfactory Field Prep: None

Number & Type of Containers: 1 Vial

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS				1	8260		06-NOV
Methylene chloride	ND	ug/l	5				
1,1-Dichloroethane	ND	ug/l	1.5				
Chloroform	ND	ug/l	1.5				
Carbon tetrachloride	ND	ug/l	1				
1,2-Dichloropropane	ND	ug/l	3.5				
Dibromochloromethane	ND	ug/l	1				
1,1,2-Trichloroethane	ND	ug/l	1.5				
2-Chloroethylvinyl ether	ND	ug/l	10				
Tetrachloroethene	ND	ug/l	1.5				
Chlorobenzene	ND	ug/l	3.5				
Trichlorofluoromethane	ND	ug/l	5				
1,2-Dichloroethane	ND	ug/l	1.5				
1,1,1-Trichloroethane	ND	ug/l	1				
Bromodichloromethane	ND	ug/l	1				
trans-1,3-Dichloropropene	ND	ug/l	1.5				
cis-1,3-Dichloropropene	ND	ug/l	1				
Bromoform	ND	ug/l	1				
1,1,2,2-Tetrachloroethane	ND	ug/l	1				
Benzene	ND	ug/l	1				
Toluene	13	ug/l	1.5				
Ethylbenzene	ND	ug/l	1				
Chloromethane	ND	ug/l	10				
Methyl bromide	ND	ug/l	2				
Vinyl chloride	ND	ug/l	3.5				
Chloroethane	ND	ug/l	2				
1,1-Dichloroethene	ND	ug/l	1.5				
trans-1,2-Dichloroethene	ND	ug/l	1.5				
Trichloroethene	ND	ug/l	1				
1,2-Dichlorobenzene	ND	ug/l	10				
1,3-Dichlorobenzene	ND	ug/l	10				
1,4-Dichlorobenzene	ND	ug/l	10				
Methyl tert butyl ether	ND	ug/l	10				
Xylenes	ND	ug/l	1				
cis-1,2-Dichloroethene	ND	ug/l	1				
Dibromomethane	ND	ug/l	10				
1,4-Dichloro-2-butane	ND	ug/l	10				
Ethanol	ND	ug/l	25				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: 9207615-06

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS continued				1	8260		06-NOV
1,4-Dichloro-2-butane	ND	ug/l	10				
Ethanol	ND	ug/l	25				
Iodomethane	ND	ug/l	10				
1,2,3-Trichloropropane	ND	ug/l	10				
Styrene	ND	ug/l	1				
Dichlorodifluoromethane	ND	ug/l	10				
Acetone	ND	ug/l	10				
Carbon disulfide	ND	ug/l	10				
2-Butanone	ND	ug/l	4.5				
Vinyl acetate	ND	ug/l	10				
4-Methyl-2-pentanone	ND	ug/l	10				
2-Hexanone	ND	ug/l	10				
Ethyl methacrylate	ND	ug/l	10				
Acrolein	ND	ug/l	25				
Acrylonitrile	ND	ug/l	10				
SURROGATE RECOVERY							
1,2-Dichloroethane-d4	105	%					
Toluene-d8	99	%					
4-Bromofluorobenzene	100	%					

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006

Laboratory Sample Number: 9207615-07 JSS-RZ1-GW-404 Date Received: 26-OCT-92
Sample Matrix: WATER Date Reported: 09-NOV-92
Condition of Sample: Satisfactory Field Prep: None
Number & Type of Containers: 3 Amber Glass,2 Vial

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Hydrocarbons, Total	ND	mg/l	.5	1	9073	03-Nov	04-Nov
Volatile Organics by GC/MS				1	8260		06-NOV
Methylene chloride	ND	ug/l	5				
1,1-Dichloroethane	ND	ug/l	1.5				
Chloroform	ND	ug/l	1.5				
Carbon tetrachloride	ND	ug/l	1				
1,2-Dichloropropane	ND	ug/l	3.5				
Dibromochloromethane	ND	ug/l	1				
1,1,2-Trichloroethane	ND	ug/l	1.5				
2-Chloroethylvinyl ether	ND	ug/l	10				
Tetrachloroethene	ND	ug/l	1.5				
Chlorobenzene	ND	ug/l	3.5				
Trichlorofluoromethane	ND	ug/l	5				
1,2-Dichloroethane	ND	ug/l	1.5				
1,1,1-Trichloroethane	ND	ug/l	1				
Bromodichloromethane	ND	ug/l	1				
trans-1,3-Dichloropropene	ND	ug/l	1.5				
cis-1,3-Dichloropropene	ND	ug/l	1				
Bromoform	ND	ug/l	1				
1,1,2,2-Tetrachloroethane	ND	ug/l	1				
Benzene	ND	ug/l	1				
Toluene	ND	ug/l	1.5				
Ethylbenzene	ND	ug/l	1				
Chloromethane	ND	ug/l	10				
Methyl bromide	ND	ug/l	2				
Vinyl chloride	ND	ug/l	3.5				
Chloroethane	ND	ug/l	2				
1,1-Dichloroethene	ND	ug/l	1.5				
trans-1,2-Dichloroethene	ND	ug/l	1.5				
Trichloroethene	ND	ug/l	1				
1,2-Dichlorobenzene	ND	ug/l	10				
1,3-Dichlorobenzene	ND	ug/l	10				
1,4-Dichlorobenzene	ND	ug/l	10				
Methyl tert butyl ether	ND	ug/l	10				
Xylenes	ND	ug/l	1				
cis-1,2-Dichloroethene	ND	ug/l	1				
Dibromomethane	ND	ug/l	10				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: 9207615-08

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS continued				1	8260		30-OCT
Iodomethane	ND	ug/l	10				
1,2,3-Trichloropropane	ND	ug/l	10				
Styrene	ND	ug/l	1				
Dichlorodifluoromethane	ND	ug/l	10				
Acetone	ND	ug/l	10				
Carbon disulfide	ND	ug/l	10				
2-Butanone	ND	ug/l	4.5				
Vinyl acetate	ND	ug/l	10				
4-Methyl-2-pentanone	ND	ug/l	10				
2-Hexanone	ND	ug/l	10				
Ethyl methacrylate	ND	ug/l	10				
Acrolein	ND	ug/l	25				
Acrylonitrile	ND	ug/l	10				
SURROGATE RECOVERY							
1,2-Dichloroethane-d4	98	%					
Toluene-d8	96	%					
4-Bromofluorobenzene	93	%					

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006

Laboratory Sample Number: 9207615-07 JSS-RZ1-GW-404 Date Received: 26-OCT-92

Sample Matrix: WATER Date Reported: 09-NOV-92

Condition of Sample: Satisfactory Field Prep: None

Number & Type of Containers: 3 Amber Glass,2 Vial

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Hydrocarbons, Total	ND	mg/l	.5	1	9073	03-Nov	04-Nov
Volatile Organics by GC/MS				1	8260		06-NOV
Methylene chloride	ND	ug/l	5				
1,1-Dichloroethane	ND	ug/l	1.5				
Chloroform	ND	ug/l	1.5				
Carbon tetrachloride	ND	ug/l	1				
1,2-Dichloropropane	ND	ug/l	3.5				
Dibromochloromethane	ND	ug/l	1				
1,1,2-Trichloroethane	ND	ug/l	1.5				
2-Chloroethylvinyl ether	ND	ug/l	10				
Tetrachloroethene	ND	ug/l	1.5				
Chlorobenzene	ND	ug/l	3.5				
Trichlorofluoromethane	ND	ug/l	5				
1,2-Dichloroethane	ND	ug/l	1.5				
1,1,1-Trichloroethane	ND	ug/l	1				
Bromodichloromethane	ND	ug/l	1				
trans-1,3-Dichloropropene	ND	ug/l	1.5				
cis-1,3-Dichloropropene	ND	ug/l	1				
Bromoform	ND	ug/l	1				
1,1,2,2-Tetrachloroethane	ND	ug/l	1				
Benzene	ND	ug/l	1				
Toluene	ND	ug/l	1.5				
Ethylbenzene	ND	ug/l	1				
Chloromethane	ND	ug/l	10				
Methyl bromide	ND	ug/l	2				
Vinyl chloride	ND	ug/l	3.5				
Chloroethane	ND	ug/l	2				
1,1-Dichloroethene	ND	ug/l	1.5				
trans-1,2-Dichloroethene	ND	ug/l	1.5				
Trichloroethene	ND	ug/l	1				
1,2-Dichlorobenzene	ND	ug/l	10				
1,3-Dichlorobenzene	ND	ug/l	10				
1,4-Dichlorobenzene	ND	ug/l	10				
Methyl tert butyl ether	ND	ug/l	10				
Xylenes	ND	ug/l	1				
cis-1,2-Dichloroethene	ND	ug/l	1				
Dibromomethane	ND	ug/l	10				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: 9207615-07

PARAMETER	RESULT	UNITS	RDL	REP	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS continued				1	8260		06-NOV
1,4-Dichloro-2-butane	ND	ug/l	10				
Ethanol	ND	ug/l	25				
Iodomethane	ND	ug/l	10				
1,2,3-Trichloropropane	ND	ug/l	10				
Styrene	ND	ug/l	1				
Dichlorodifluoromethane	ND	ug/l	10				
Acetone	ND	ug/l	10				
Carbon disulfide	ND	ug/l	10				
2-Butanone	ND	ug/l	4.5				
Vinyl acetate	ND	ug/l	10				
4-Methyl-2-pentanone	ND	ug/l	10				
2-Hexanone	ND	ug/l	10				
Ethyl methacrylate	ND	ug/l	10				
Acrolein	ND	ug/l	25				
Acrylonitrile	ND	ug/l	10				
SURROGATE RECOVERY							
1,2-Dichloroethane-d4	105	%					
Toluene-d8	100	%					
4-Bromofluorobenzene	88	%					
Hydrocarbon Scan GC 8100 Modified				1	8100M	29-Oct	03-NOV
Mineral Spirits	ND	mg/l	1				
Gasoline	ND	mg/l	1				
Fuel Oil #2	ND	mg/l	1				
Fuel Oil #4	ND	mg/l	1				
Fuel Oil #6	ND	mg/l	1				
Motor Oil	ND	mg/l	1				
Kerosene	ND	mg/l	1				
Diesel Fuel	ND	mg/l	1				
Naphthalene	ND	mg/l	1				

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006

Laboratory Sample Number: 9207615-08 Date Received: 26-OCT-92
Sample Matrix: TRIP BLANK WATER Date Reported: 09-NOV-92
Condition of Sample: Satisfactory Field Prep: None
Number & Type of Containers: 1 Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS				1 8260		30-OCT
Methylene chloride	ND	ug/l	5			
1,1-Dichloroethane	ND	ug/l	1.5			
Chloroform	ND	ug/l	1.5			
Carbon tetrachloride	ND	ug/l	1			
1,2-Dichloropropane	ND	ug/l	3.5			
Dibromochloromethane	ND	ug/l	1			
1,1,2-Trichloroethane	ND	ug/l	1.5			
2-Chloroethylvinyl ether	ND	ug/l	10			
Tetrachloroethene	ND	ug/l	1.5			
Chlorobenzene	ND	ug/l	3.5			
Trichlorofluoromethane	ND	ug/l	5			
1,2-Dichloroethane	ND	ug/l	1.5			
1,1,1-Trichloroethane	ND	ug/l	1			
Bromodichloromethane	ND	ug/l	1			
trans-1,3-Dichloropropene	ND	ug/l	1.5			
cis-1,3-Dichloropropene	ND	ug/l	1			
Bromoform	ND	ug/l	1			
1,1,2,2-Tetrachloroethane	ND	ug/l	1			
Benzene	ND	ug/l	1			
Toluene	ND	ug/l	1.5			
Ethylbenzene	ND	ug/l	1			
Chloromethane	ND	ug/l	10			
Methyl bromide	ND	ug/l	2			
Vinyl chloride	ND	ug/l	3.5			
Chloroethane	ND	ug/l	2			
1,1-Dichloroethene	ND	ug/l	1.5			
trans-1,2-Dichloroethene	ND	ug/l	1.5			
Trichloroethene	ND	ug/l	1			
1,2-Dichlorobenzene	ND	ug/l	10			
1,3-Dichlorobenzene	ND	ug/l	10			
1,4-Dichlorobenzene	ND	ug/l	10			
Methyl tert butyl ether	ND	ug/l	10			
Xylenes	ND	ug/l	1			
cis-1,2-Dichloroethene	ND	ug/l	1			
Dibromomethane	ND	ug/l	10			
1,4-Dichloro-2-butane	ND	ug/l	10			
Ethanol	ND	ug/l	25			

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: 9207615-08

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS continued				1	8260		30-OCT
Iodomethane	ND	ug/l	10				
1,2,3-Trichloropropane	ND	ug/l	10				
Styrene	ND	ug/l	1				
Dichlorodifluoromethane	ND	ug/l	10				
Acetone	ND	ug/l	10				
Carbon disulfide	ND	ug/l	10				
2-Butanone	ND	ug/l	4.5				
Vinyl acetate	ND	ug/l	10				
4-Methyl-2-pentanone	ND	ug/l	10				
2-Hexanone	ND	ug/l	10				
Ethyl methacrylate	ND	ug/l	10				
Acrolein	ND	ug/l	25				
Acrylonitrile	ND	ug/l	10				
SURROGATE RECOVERY							
1,2-Dichloroethane-d4	98	%					
Toluene-d8	96	%					
4-Bromofluorobenzene	93	%					

Comments: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE DUPLICATE ANALYSIS

Laboratory Job Number: 9207615

Parameter	Value 1	Value 2	RPD	Units
Cyanide, Total	DUPLICATE for sample(s) 01-03			
	ND	ND	NC	mg/kg
Hydrocarbons, Total	DUPLICATE for sample(s) 04,06-07			
	3.7	4.1	10	mg/l
Hydrocarbons, Total	DUPLICATE for sample(s) 01-03			
	22400	17600	24	mg/kg
Total Metals	DUPLICATE for sample(s) 01-03			
Mercury, Total	ND	ND	NC	mg/kg
Total Metals	DUPLICATE for sample(s) 01-03			
Antimony, Total	ND	ND	NC	mg/kg
Arsenic, Total	3.1	3.4	9	mg/kg
Barium, Total	18.7	19	2	mg/kg
Beryllium, Total	ND	ND	NC	mg/kg
Cadmium, Total	ND	ND	NC	mg/kg
Chromium, Total	10.4	10.5	1	mg/kg
Copper, Total	8.3	8.4	1	mg/kg
Lead, Total	14.6	16.9	15	mg/kg
Nickel, Total	ND	ND	NC	mg/kg
Selenium, Total	ND	ND	NC	mg/kg
Silver, Total	ND	ND	NC	mg/kg
Thallium, Total	ND	ND	NC	mg/kg
Zinc, Total	25	25.3	1	mg/kg

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE SPIKE ANALYSES

Laboratory Job Number: 9207615

Parameter	% Recovery
Cyanide, Total	SPIKE for sample(s) 01-03
	114
Hydrocarbons, Total	SPIKE for sample(s) 04,06-07
	101
Hydrocarbons, Total	SPIKE for sample(s) 01-03
	101
Total Metals	SPIKE for sample(s) 01-03
Mercury, Total	140
Total Metals	SPIKE for sample(s) 01-03
Arsenic, Total	98
Barium, Total	107
Beryllium, Total	121
Cadmium, Total	110
Chromium, Total	75
Copper, Total	108
Lead, Total	105
Nickel, Total	86
Selenium, Total	100
Silver, Total	80
Thallium, Total	106
Zinc, Total	110

ALPHA ANALYTICAL LABS
ADDENDUM I
REFERENCES

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1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. 1986.

3. Standard Methods for Examination of Water and Waste Water. APHA-AWWA-WPCF. 17th Edition. 1989.

ALPHA ANALYTICAL LABORATORIES

RELATIVE PERCENT DIFFERENCE

CRITERIA FOR DUPLICATE ANALYSIS

PARAMETER GROUP	WATER	SOIL
Organics:		
Volatile Organics	30 %	30 %
Acid/Base/Neutrals	40 %	40 %
Pesticides/PCB's	40 %	40 %
Inorganics:		
Metals	20 %	30 %
Wet Chemistry	30 %	30 %

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE MS/MSD ANALYSIS

Laboratory Job Number: 9207615

Parameter	MS %	MSD %	RPD
Volatile Organics by GC/MS Spike Recovery MS/MSD for sample(s) 08			
1,1-Dichloroethene	88	90	2
Trichloroethene	83	88	6
Benzene	86	90	5
Toluene	84	88	5
Chlorobenzene	85	90	6
Volatile Organics by GC/MS Spike Recovery MS/MSD for sample(s) 04-05			
1,1-Dichloroethene	91	80	13
Trichloroethene	94	82	14
Benzene	95	88	8
Toluene	108	93	15
Chlorobenzene	93	85	9
Volatile Organics by GC/MS Spike Recovery MS/MSD for sample(s) 06			
1,1-Dichloroethene	92	90	2
Trichloroethene	93	94	1
Benzene	94	96	2
Toluene	75	74	1
Chlorobenzene	90	100	11
Volatile Organics by GC/MS Spike Recovery MS/MSD for sample(s) 07			
1,1-Dichloroethene	91	92	1
Trichloroethene	98	91	7
Benzene	95	90	5
Toluene	96	89	8
Chlorobenzene	98	90	9
Volatile Organics by GC/MS Spike Recovery MS/MSD for sample(s) 01-02			
1,1-Dichloroethene	95	94	1
Trichloroethene	95	98	3
Benzene	96	95	1
Toluene	95	97	2
Chlorobenzene	94	98	4
Volatile Organics by GC/MS Spike Recovery MS/MSD for sample(s) 03			
1,1-Dichloroethene	101	95	6
Trichloroethene	91	81	12
Benzene	92	82	11
Toluene	93	82	13
Chlorobenzene	94	82	14

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE MS/MSD ANALYSIS

Laboratory Job Number: 9207615

Continued

Parameter	MS %	MSD %	RPD
Semi-volatile Organic by GC/MS	MS/MSD for sample(s) 01-03		
p-Chloro-m-cresol	88	83	6
2-Chlorophenol	64	58	10
4-Nitrophenol	66	67	2
Pentachlorophenol	87	86	1
Phenol	51	42	19
Acenaphthene	88	91	3
1,2,4-Trichlorobenzene	91	88	3
1,4-Dichlorobenzene	80	74	8
2,4-Dinitrotoluene	95	96	1
N-Nitrosodipropylamine	80	76	5
Pyrene	90	98	9
SURROGATE RECOVERY			
2-Fluorophenol	60	50	18
Phenol-d6	68	58	16
Nitrobenzene-d5	90	80	12
2-Fluorobiphenyl	97	97	0
2,4,6-Tribromophenol	81	84	4
4-Terphenyl-d14	104	99	5
Organochlorine Pesticides	MS/MSD for sample(s) 01-03		
Lindane	102	104	2
Heptachlor	95	99	4
Aldrin	113	113	0
Endrin	116	120	3
Dieldrin	105	108	3
4,4'-DDT	89	93	4
SURROGATE RECOVERY			
Dibutylchlorendate	104	108	4

ALPHA ANALYTICAL LABORATORIES

ACCEPTABLE SURROGATE SPIKE RECOVERY LIMITS

FRACTION	SURROGATE COMPOUND	LOW/MEDIUM WATER	LOW/MEDIUM SOIL/SEDIMENT
VOA	Toluene-d_8	88-110 %	81-117 %
VOA	4-Bromofluorobenzene	86-115 %	74-121 %
VOA	1,2-Dichloroethane-d_4	76-114 %	70-121 %
BNA	Nitrobenzene-d_5	35-114 %	23-120 %
BNA	2-Fluorobiphenyl	43-116 %	30-115 %
BNA	p-Terphenyl-d_{14}	33-141 %	18-137 %
BNA	Phenol-d_5	10-94 %	24-113 %
BNA	2-Fluorophenol	10-100 %	25-121 %
BNA	2,4,6-Tribromophenol	10-123 %	19-122 %
Pest.	Dibutylchlorendate	60-150 % *	60-150 % *

* Advisory Limit - No action required

CHAIN OF CUSTODY RECORD

Rizzo Associates, Inc.
235 West Central Street
Natick, MA 01760
(508) 651-3401
(508) 651-1189 (FAX)

Rizzo Project Number: 2428-01
Rizzo Project Name: Solomon / Somerville
Samplers (signatures): Cheryl A Place

Lab: Alpha
Lab ID #:
Send report to: CAP
Turnaround Time: 2 weeks

Rizzo Sample Number	Sample Depth	Sample Location	Sample Collected		Container			Sample Matrix	Requested Analyses
			Date	Time	#	Type	Preservative		
JSS-RZ2-GW-401	—	RIZ2	10/26/92	10:10	2	VOA	HCl	H2O	8260
↓	↓	↓	↓	↓	2	glass	HCl	↓	TPH
↓	↓	↓	↓	↓	1	glass	None	↓	Pet scan (mineral spirits)
JSS-RZ2GW-402	—	RIZ2	10/26/92	↓	2	VOA	HCl	↓	8260
JSS RZ3GW-403	—	RIZ3	10/26/92	10:15	2	VOA	HCl	↓	8260
↓	↓	↓	↓	↓	2	glass	HCl	↓	TPH
JSS RZ1GW-401	—	RIZ1	10/26/92	11:45	2	VOA	HCl	↓	8260
↓	↓	↓	↓	↓	2	glass	HCl	↓	TPH
↓	↓	↓	↓	↓	1	glass	None	↓	Pet scan (mineral spirits)
Trip blank	—	—	10/26/92	—	1	VOA	HCl	↓	8260

Relinquished by: Cheryl A Place
Received by: Scott Stuart
Date: 10/26/92
Time: 2:50

Method of Shipment: Pick up.

WHITE - ANALYTICAL LABORATORY · YELLOW - RIZZO OFFICE · PINK - CHAIN-OF-CUSTODY NOTEBOOK · GOLD - PROJECT FILE

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: Rizzo Associates
Address: 1 Grant Street
Framingham, MA 01701-9005
Attn: Ms. Janina Curtis
Project Number: 2428-07
Site: YK MANAGEMENT

Laboratory Job Number: L0211671
Date Received: 14-NOV-2002
Date Reported: 21-NOV-2002
Delivery Method: Alpha

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0211671-01	GP-1-GW	SOMERVILLE, MA
L0211671-02	GP-2-GW	SOMERVILLE, MA
L0211671-03	GP-3-GW	SOMERVILLE, MA
L0211671-04	GP-4-GW	SOMERVILLE, MA
L0211671-05	GP-5-GW	SOMERVILLE, MA
L0211671-06	GP-1-4-8'	SOMERVILLE, MA
L0211671-07	GP-2-8-12'	SOMERVILLE, MA
L0211671-08	GP-3-4-8'	SOMERVILLE, MA
L0211671-09	GP-4-8-12'	SOMERVILLE, MA
L0211671-10	GP-5-4-8'	SOMERVILLE, MA
L0211671-11	TRIP BLANK	SOMERVILLE, MA
L0211671-12	TRIP BLANK	SOMERVILLE, MA
L0211671-13	TRIP BLANK	SOMERVILLE, MA

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: Scott McLean

Scott McLean - Technical Director
This document electronically signed

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0211671

Alpha Report L0211671:

Volatile Organics

The analysis of Volatile Organics by EPA Method 5035/8260B Low-Level could not be performed on Alpha Sample(s) L0211671-06, -09, and -10 due to the vial cap not being sealed properly.

One or more surrogate percent recoveries for Alpha Sample(s) L0211671-01 are outside the acceptance criteria for the method. However, due to the matrix of the sample(s), no further actions could be performed.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0211671-01
GP-1-GW
Sample Matrix: WATER

Date Collected: 14-NOV-2002 12:40
Date Received : 14-NOV-2002
Date Reported : 21-NOV-2002

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260				1	8260B		1118 17:40	AR
Methylene chloride	ND	ug/l	5.0					
1,1-Dichloroethane	ND	ug/l	0.75					
Chloroform	ND	ug/l	0.75					
Carbon tetrachloride	ND	ug/l	0.50					
1,2-Dichloropropane	ND	ug/l	1.8					
Dibromochloromethane	ND	ug/l	0.50					
1,1,2-Trichloroethane	ND	ug/l	0.75					
Tetrachloroethene	ND	ug/l	0.50					
Chlorobenzene	0.58	ug/l	0.50					
Trichlorofluoromethane	ND	ug/l	2.5					
1,2-Dichloroethane	ND	ug/l	0.50					
1,1,1-Trichloroethane	ND	ug/l	0.50					
Bromodichloromethane	ND	ug/l	0.50					
trans-1,3-Dichloropropene	ND	ug/l	0.50					
cis-1,3-Dichloropropene	ND	ug/l	0.50					
1,1-Dichloropropene	ND	ug/l	2.5					
Bromoform	ND	ug/l	2.0					
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50					
Benzene	ND	ug/l	0.50					
Toluene	ND	ug/l	0.75					
Ethylbenzene	ND	ug/l	0.50					
Chloromethane	ND	ug/l	2.5					
Bromomethane	ND	ug/l	1.0					
Vinyl chloride	ND	ug/l	1.0					
Chloroethane	ND	ug/l	1.0					
1,1-Dichloroethene	ND	ug/l	0.50					
trans-1,2-Dichloroethene	ND	ug/l	0.75					
Trichloroethene	ND	ug/l	0.50					
1,2-Dichlorobenzene	ND	ug/l	2.5					
1,3-Dichlorobenzene	ND	ug/l	2.5					
1,4-Dichlorobenzene	ND	ug/l	2.5					
Methyl tert butyl ether	ND	ug/l	1.0					
p/m-Xylene	ND	ug/l	0.50					
o-Xylene	ND	ug/l	0.50					
cis-1,2-Dichloroethene	ND	ug/l	0.50					
Dibromomethane	ND	ug/l	5.0					
1,4-Dichlorobutane	ND	ug/l	5.0					
Iodomethane	ND	ug/l	5.0					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-01
GP-1-GW

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260 continued				1 8260B		1118 17:40	AR
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
Vinyl acetate	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				
Ethyl methacrylate	ND	ug/l	5.0				
Acrolein	ND	ug/l	12.				
Acrylonitrile	ND	ug/l	5.0				
Bromochloromethane	ND	ug/l	2.5				
Tetrahydrofuran	ND	ug/l	10.				
2,2-Dichloropropane	ND	ug/l	2.5				
1,2-Dibromoethane	ND	ug/l	2.5				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
Bromobenzene	ND	ug/l	2.5				
n-Butylbenzene	23.	ug/l	0.50				
sec-Butylbenzene	52.	ug/l	0.50				
tert-Butylbenzene	ND	ug/l	2.5				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	2.5				
Isopropylbenzene	58.	ug/l	0.50				
p-Isopropyltoluene	28.	ug/l	0.50				
Naphthalene	ND	ug/l	2.5				
n-Propylbenzene	100.	ug/l	0.50				
1,2,3-Trichlorobenzene	ND	ug/l	2.5				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
1,3,5-Trimethylbenzene	ND	ug/l	2.5				
1,2,4-Trimethylbenzene	6.1	ug/l	2.5				
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5				
Ethyl ether	ND	ug/l	2.5				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	108.	%	
Toluene-d8	95.0	%	
4-Bromofluorobenzene	212.	%	
Dibromofluoromethane	107.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-01
GP-1-GW

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1118 12:01	MM

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
VPH Standard analysis reports only range data with no adjustments.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Unadjusted	1060	ug/l	40.0
C9-C10 Aromatics	758.	ug/l	40.0

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	92.0	%	70-130
2,5-Dibromotoluene-FID	88.0	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-01
GP-1-GW

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46-98-1	1115 10:00	1118 21:25	PD

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	115.	ug/l	100.
C19-C36 Aliphatics	ND	ug/l	100.
C11-C22 Aromatics, Unadjusted	ND	ug/l	100.
C11-C22 Aromatics, Adjusted	ND	ug/l	100.
Naphthalene	ND	ug/l	20.0
2-Methylnaphthalene	ND	ug/l	20.0
Acenaphthylene	ND	ug/l	20.0
Acenaphthene	ND	ug/l	20.0
Fluorene	ND	ug/l	20.0
Phenanthrene	ND	ug/l	20.0
Anthracene	ND	ug/l	20.0
Fluoranthene	ND	ug/l	20.0
Pyrene	ND	ug/l	20.0
Benzo(a)anthracene	ND	ug/l	20.0
Chrysene	ND	ug/l	20.0
Benzo(b)fluoranthene	ND	ug/l	20.0
Benzo(k)fluoranthene	ND	ug/l	20.0
Benzo(a)pyrene	ND	ug/l	20.0
Indeno(1,2,3-cd)Pyrene	ND	ug/l	20.0
Dibenzo(a,h)anthracene	ND	ug/l	20.0
Benzo(g,h,i)perylene	ND	ug/l	20.0

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	59.0	%	40-140
o-Terphenyl	78.0	%	40-140
2-Fluorobiphenyl	74.0	%	40-140
2-Bromonaphthalene	58.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0211671-02 GP-2-GW
Sample Matrix: WATER
Condition of Sample: Satisfactory
Number & Type of Containers: 2-Amber,4-Vial

Date Collected: 14-NOV-2002 13:15
Date Received : 14-NOV-2002
Date Reported : 21-NOV-2002
Field Prep: None

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260				1 8260B		1118 18:20	AR
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
1,1-Dichloropropene	ND	ug/l	2.5				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Benzene	ND	ug/l	0.50				
Toluene	ND	ug/l	0.75				
Ethylbenzene	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
p/m-Xylene	ND	ug/l	0.50				
o-Xylene	ND	ug/l	0.50				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,4-Dichlorobutane	ND	ug/l	5.0				
Iodomethane	ND	ug/l	5.0				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-02
GP-2-GW

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260 continued				1	8260B		1118 18:20	AR
1,2,3-Trichloropropane	ND	ug/l	5.0					
Styrene	ND	ug/l	0.50					
Dichlorodifluoromethane	ND	ug/l	5.0					
Acetone	ND	ug/l	5.0					
Carbon disulfide	ND	ug/l	5.0					
2-Butanone	ND	ug/l	5.0					
Vinyl acetate	ND	ug/l	5.0					
4-Methyl-2-pentanone	ND	ug/l	5.0					
2-Hexanone	ND	ug/l	5.0					
Ethyl methacrylate	ND	ug/l	5.0					
Acrolein	ND	ug/l	12.					
Acrylonitrile	ND	ug/l	5.0					
Bromochloromethane	ND	ug/l	2.5					
Tetrahydrofuran	ND	ug/l	10.					
2,2-Dichloropropane	ND	ug/l	2.5					
1,2-Dibromoethane	ND	ug/l	2.5					
1,3-Dichloropropane	ND	ug/l	2.5					
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50					
Bromobenzene	ND	ug/l	2.5					
n-Butylbenzene	0.93	ug/l	0.50					
sec-Butylbenzene	5.6	ug/l	0.50					
tert-Butylbenzene	ND	ug/l	2.5					
o-Chlorotoluene	ND	ug/l	2.5					
p-Chlorotoluene	ND	ug/l	2.5					
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5					
Hexachlorobutadiene	ND	ug/l	2.5					
Isopropylbenzene	0.71	ug/l	0.50					
p-Isopropyltoluene	ND	ug/l	0.50					
Naphthalene	ND	ug/l	2.5					
n-Propylbenzene	ND	ug/l	0.50					
1,2,3-Trichlorobenzene	ND	ug/l	2.5					
1,2,4-Trichlorobenzene	ND	ug/l	2.5					
1,3,5-Trimethylbenzene	ND	ug/l	2.5					
1,2,4-Trimethylbenzene	ND	ug/l	2.5					
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5					
Ethyl ether	ND	ug/l	2.5					

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	107.	%	
Toluene-d8	99.0	%	
4-Bromofluorobenzene	125.	%	
Dibromofluoromethane	104.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-02
GP-2-GW

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1118 12:52	MH

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
VPH Standard analysis reports only range data with no adjustments.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Unadjusted	107.	ug/l	40.0
C9-C10 Aromatics	61.8	ug/l	40.0

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	82.0	%	70-130
2,5-Dibromotoluene-FID	77.0	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-02
GP-2-GW

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	1115 10:00	1118 12:12	PD

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	ug/l	100.
C19-C36 Aliphatics	ND	ug/l	100.
C11-C22 Aromatics, Unadjusted	ND	ug/l	100.
C11-C22 Aromatics, Adjusted	ND	ug/l	100.
Naphthalene	ND	ug/l	20.0
2-Methylnaphthalene	ND	ug/l	20.0
Acenaphthylene	ND	ug/l	20.0
Acenaphthene	ND	ug/l	20.0
Fluorene	ND	ug/l	20.0
Phenanthrene	ND	ug/l	20.0
Anthracene	ND	ug/l	20.0
Fluoranthene	ND	ug/l	20.0
Pyrene	ND	ug/l	20.0
Benzo(a)anthracene	ND	ug/l	20.0
Chrysene	ND	ug/l	20.0
Benzo(b)fluoranthene	ND	ug/l	20.0
Benzo(k)fluoranthene	ND	ug/l	20.0
Benzo(a)pyrene	ND	ug/l	20.0
Indeno(1,2,3-cd)Pyrene	ND	ug/l	20.0
Dibenzo(a,h)anthracene	ND	ug/l	20.0
Benzo(g,h,i)perylene	ND	ug/l	20.0

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	50.0	%	40-140
o-Terphenyl	75.0	%	40-140
2-Fluorobiphenyl	70.0	%	40-140
2-Bromonaphthalene	62.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0211671-03
GP-3-GW
Sample Matrix: WATER

Date Collected: 14-NOV-2002 12:00
Date Received : 14-NOV-2002
Date Reported : 21-NOV-2002

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260				1 8260B		1118 18:58	AR
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
1,1-Dichloropropene	ND	ug/l	2.5				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Benzene	ND	ug/l	0.50				
Toluene	ND	ug/l	0.75				
Ethylbenzene	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
p/m-Xylene	ND	ug/l	0.50				
o-Xylene	ND	ug/l	0.50				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,4-Dichlorobutane	ND	ug/l	5.0				
Iodomethane	ND	ug/l	5.0				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-03
GP-3-GW

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260 continued				1 8260B		1118 18:58	AR
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
Vinyl acetate	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				
Ethyl methacrylate	ND	ug/l	5.0				
Acrolein	ND	ug/l	12.				
Acrylonitrile	ND	ug/l	5.0				
Bromochloromethane	ND	ug/l	2.5				
Tetrahydrofuran	ND	ug/l	10.				
2,2-Dichloropropane	ND	ug/l	2.5				
1,2-Dibromoethane	ND	ug/l	2.5				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
Bromobenzene	ND	ug/l	2.5				
n-Butylbenzene	ND	ug/l	0.50				
sec-Butylbenzene	ND	ug/l	0.50				
tert-Butylbenzene	ND	ug/l	2.5				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	2.5				
Isopropylbenzene	ND	ug/l	0.50				
p-Isopropyltoluene	ND	ug/l	0.50				
Naphthalene	ND	ug/l	2.5				
n-Propylbenzene	ND	ug/l	0.50				
1,2,3-Trichlorobenzene	ND	ug/l	2.5				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
1,3,5-Trimethylbenzene	ND	ug/l	2.5				
1,2,4-Trimethylbenzene	ND	ug/l	2.5				
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5				
Ethyl ether	ND	ug/l	2.5				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	106.	%	
Toluene-d8	100.	%	
4-Bromofluorobenzene	101.	%	
Dibromofluoromethane	102.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-03
GP-3-GW

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1115 20:05	MM

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
VPH Standard analysis reports only range data with no adjustments.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C10 Aromatics	ND	ug/l	40.0

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	91.0	%	70-130
2,5-Dibromotoluene-FID	86.0	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-03
GP-3-GW

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	1119 10:00	1120 15:32	PD

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	ug/l	114.
C19-C36 Aliphatics	ND	ug/l	114.
C11-C22 Aromatics, Unadjusted	ND	ug/l	114.
C11-C22 Aromatics, Adjusted	ND	ug/l	114.
Naphthalene	ND	ug/l	22.7
2-Methylnaphthalene	ND	ug/l	22.7
Acenaphthylene	ND	ug/l	22.7
Acenaphthene	ND	ug/l	22.7
Fluorene	ND	ug/l	22.7
Phenanthrene	ND	ug/l	22.7
Anthracene	ND	ug/l	22.7
Fluoranthene	ND	ug/l	22.7
Pyrene	ND	ug/l	22.7
Benzo(a)anthracene	ND	ug/l	22.7
Chrysene	ND	ug/l	22.7
Benzo(b)fluoranthene	ND	ug/l	22.7
Benzo(k)fluoranthene	ND	ug/l	22.7
Benzo(a)pyrene	ND	ug/l	22.7
Indeno(1,2,3-cd)Pyrene	ND	ug/l	22.7
Dibenzo(a,h)anthracene	ND	ug/l	22.7
Benzo(g,h,i)perylene	ND	ug/l	22.7

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	44.0	%	40-140
o-Terphenyl	69.0	%	40-140
2-Fluorobiphenyl	66.0	%	40-140
2-Bromonaphthalene	66.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0211671-04
GP-4-GW
Sample Matrix: WATER

Date Collected: 14-NOV-2002 13:40
Date Received : 14-NOV-2002
Date Reported : 21-NOV-2002

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260				1 8260B		1118 19:37	AR
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
1,1-Dichloropropene	ND	ug/l	2.5				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Benzene	ND	ug/l	0.50				
Toluene	ND	ug/l	0.75				
Ethylbenzene	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	1.7	ug/l	1.0				
p/m-Xylene	ND	ug/l	0.50				
o-Xylene	ND	ug/l	0.50				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,4-Dichlorobutane	ND	ug/l	5.0				
Iodomethane	ND	ug/l	5.0				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-04
GP-4-GW

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260 continued				1 8260B		1118 19:37	AR
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
Vinyl acetate	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				
Ethyl methacrylate	ND	ug/l	5.0				
Acrolein	ND	ug/l	12.				
Acrylonitrile	ND	ug/l	5.0				
Bromochloromethane	ND	ug/l	2.5				
Tetrahydrofuran	ND	ug/l	10.				
2,2-Dichloropropane	ND	ug/l	2.5				
1,2-Dibromoethane	ND	ug/l	2.5				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
Bromobenzene	ND	ug/l	2.5				
n-Butylbenzene	ND	ug/l	0.50				
sec-Butylbenzene	ND	ug/l	0.50				
tert-Butylbenzene	ND	ug/l	2.5				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	2.5				
Isopropylbenzene	ND	ug/l	0.50				
p-Isopropyltoluene	ND	ug/l	0.50				
Naphthalene	ND	ug/l	2.5				
n-Propylbenzene	ND	ug/l	0.50				
1,2,3-Trichlorobenzene	ND	ug/l	2.5				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
1,3,5-Trimethylbenzene	ND	ug/l	2.5				
1,2,4-Trimethylbenzene	ND	ug/l	2.5				
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5				
Ethyl ether	ND	ug/l	2.5				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	106.	%	
Toluene-d8	100.	%	
4-Bromofluorobenzene	101.	%	
Dibromofluoromethane	104.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-04
GP-4-GW

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1115 20:55	MM

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
VPH Standard analysis reports only range data with no adjustments.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C10 Aromatics	ND	ug/l	40.0

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	85.0	%	70-130
2,5-Dibromotoluene-FID	82.0	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-04
GP-4-GW

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	1115 10:00	1118 13:44	PD

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	ug/l	100.
C19-C36 Aliphatics	ND	ug/l	100.
C11-C22 Aromatics, Unadjusted	ND	ug/l	100.
C11-C22 Aromatics, Adjusted	ND	ug/l	100.
Naphthalene	ND	ug/l	20.0
2-Methylnaphthalene	ND	ug/l	20.0
Acenaphthylene	ND	ug/l	20.0
Acenaphthene	ND	ug/l	20.0
Fluorene	ND	ug/l	20.0
Phenanthrene	ND	ug/l	20.0
Anthracene	ND	ug/l	20.0
Fluoranthene	ND	ug/l	20.0
Pyrene	ND	ug/l	20.0
Benzo(a)anthracene	ND	ug/l	20.0
Chrysene	ND	ug/l	20.0
Benzo(b)fluoranthene	ND	ug/l	20.0
Benzo(k)fluoranthene	ND	ug/l	20.0
Benzo(a)pyrene	ND	ug/l	20.0
Indeno(1,2,3-cd)Pyrene	ND	ug/l	20.0
Dibenzo(a,h)anthracene	ND	ug/l	20.0
Benzo(g,h,i)perylene	ND	ug/l	20.0

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	66.0	%	40-140
o-Terphenyl	79.0	%	40-140
2-Fluorobiphenyl	81.0	%	40-140
2-Bromonaphthalene	71.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0211671-05
GP-5-GW
Sample Matrix: WATER

Date Collected: 14-NOV-2002 14:30
Date Received : 14-NOV-2002
Date Reported : 21-NOV-2002

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260				1 8260B		1118 20:16	AR
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
1,1-Dichloropropene	ND	ug/l	2.5				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Benzene	ND	ug/l	0.50				
Toluene	ND	ug/l	0.75				
Ethylbenzene	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
p/m-Xylene	ND	ug/l	0.50				
o-Xylene	ND	ug/l	0.50				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,4-Dichlorobutane	ND	ug/l	5.0				
Iodomethane	ND	ug/l	5.0				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-05
GP-5-GW

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260 continued				1 8260B		1118 20:16	AR
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
Vinyl acetate	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				
Ethyl methacrylate	ND	ug/l	5.0				
Acrolein	ND	ug/l	12.				
Acrylonitrile	ND	ug/l	5.0				
Bromochloromethane	ND	ug/l	2.5				
Tetrahydrofuran	ND	ug/l	10.				
2,2-Dichloropropane	ND	ug/l	2.5				
1,2-Dibromoethane	ND	ug/l	2.5				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
Bromobenzene	ND	ug/l	2.5				
n-Butylbenzene	ND	ug/l	0.50				
sec-Butylbenzene	ND	ug/l	0.50				
tert-Butylbenzene	ND	ug/l	2.5				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	2.5				
Isopropylbenzene	ND	ug/l	0.50				
p-Isopropyltoluene	ND	ug/l	0.50				
Naphthalene	ND	ug/l	2.5				
n-Propylbenzene	ND	ug/l	0.50				
1,2,3-Trichlorobenzene	ND	ug/l	2.5				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
1,3,5-Trimethylbenzene	ND	ug/l	2.5				
1,2,4-Trimethylbenzene	ND	ug/l	2.5				
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5				
Ethyl ether	ND	ug/l	2.5				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	108.	%	
Toluene-d8	101.	%	
4-Bromofluorobenzene	101.	%	
Dibromofluoromethane	106.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-05
GP-5-GW

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1115 18:24	MM

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
VPH Standard analysis reports only range data with no adjustments.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C10 Aromatics	ND	ug/l	40.0

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	87.0	%	70-130
2,5-Dibromotoluene-FID	84.0	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-05
GP-5-GW

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	1115 10:00	1118 14:29	PD

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	ug/l	100.
C19-C36 Aliphatics	ND	ug/l	100.
C11-C22 Aromatics, Unadjusted	ND	ug/l	100.
C11-C22 Aromatics, Adjusted	ND	ug/l	100.
Naphthalene	ND	ug/l	20.0
2-Methylnaphthalene	ND	ug/l	20.0
Acenaphthylene	ND	ug/l	20.0
Acenaphthene	ND	ug/l	20.0
Fluorene	ND	ug/l	20.0
Phenanthrene	ND	ug/l	20.0
Anthracene	ND	ug/l	20.0
Fluoranthene	ND	ug/l	20.0
Pyrene	ND	ug/l	20.0
Benzo(a)anthracene	ND	ug/l	20.0
Chrysene	ND	ug/l	20.0
Benzo(b)fluoranthene	ND	ug/l	20.0
Benzo(k)fluoranthene	ND	ug/l	20.0
Benzo(a)pyrene	ND	ug/l	20.0
Indeno(1,2,3-cd)Pyrene	ND	ug/l	20.0
Dibenzo(a,h)anthracene	ND	ug/l	20.0
Benzo(g,h,i)perylene	ND	ug/l	20.0

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	62.0	%	40-140
o-Terphenyl	82.0	%	40-140
2-Fluorobiphenyl	79.0	%	40-140
2-Bromonaphthalene	74.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0211671-06
GP-1-4-8'
Sample Matrix: SOIL

Date Collected: 13-NOV-2002 09:30
Date Received : 14-NOV-2002
Date Reported : 21-NOV-2002

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber,1-Plastic,3-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	91.	%	0.10	30 2540G		1115 14:48	BW
Volatile Organics 8260 via High 5035				1 8260B		1120 18:19	BT
Methylene chloride	ND	ug/kg	520				
1,1-Dichloroethane	ND	ug/kg	78.				
Chloroform	ND	ug/kg	78.				
Carbon tetrachloride	ND	ug/kg	52.				
1,2-Dichloropropane	ND	ug/kg	180				
Dibromochloromethane	ND	ug/kg	52.				
1,1,2-Trichloroethane	ND	ug/kg	78.				
Tetrachloroethene	ND	ug/kg	52.				
Chlorobenzene	ND	ug/kg	52.				
Trichlorofluoromethane	ND	ug/kg	260				
1,2-Dichloroethane	ND	ug/kg	52.				
1,1,1-Trichloroethane	ND	ug/kg	52.				
Bromodichloromethane	ND	ug/kg	52.				
trans-1,3-Dichloropropene	ND	ug/kg	52.				
cis-1,3-Dichloropropene	ND	ug/kg	52.				
1,1-Dichloropropene	ND	ug/kg	260				
Bromoform	ND	ug/kg	210				
1,1,2,2-Tetrachloroethane	ND	ug/kg	52.				
Benzene	ND	ug/kg	52.				
Toluene	ND	ug/kg	78.				
Ethylbenzene	ND	ug/kg	52.				
Chloromethane	ND	ug/kg	260				
Bromomethane	ND	ug/kg	100				
Vinyl chloride	ND	ug/kg	100				
Chloroethane	ND	ug/kg	100				
1,1-Dichloroethene	ND	ug/kg	52.				
trans-1,2-Dichloroethene	ND	ug/kg	78.				
Trichloroethene	ND	ug/kg	52.				
1,2-Dichlorobenzene	ND	ug/kg	260				
1,3-Dichlorobenzene	ND	ug/kg	260				
1,4-Dichlorobenzene	ND	ug/kg	260				
Methyl tert butyl ether	ND	ug/kg	100				
p/m-Xylene	ND	ug/kg	52.				
o-Xylene	ND	ug/kg	52.				
cis-1,2-Dichloroethene	ND	ug/kg	52.				
Dibromomethane	ND	ug/kg	520				

Comments: Complete list of References and Glossary of Terms found in Addendum I

Laboratory Sample Number: L0211671-06
GP-1-4-8'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics 8260 via High 5035 continued				1 8260B		1120 18:19	BT
1,4-Dichlorobutane	ND	ug/kg	520				
Iodomethane	ND	ug/kg	520				
1,2,3-Trichloropropane	ND	ug/kg	520				
Styrene	ND	ug/kg	52.				
Dichlorodifluoromethane	ND	ug/kg	520				
Acetone	ND	ug/kg	520				
Carbon disulfide	ND	ug/kg	520				
2-Butanone	ND	ug/kg	520				
Vinyl acetate	ND	ug/kg	520				
4-Methyl-2-pentanone	ND	ug/kg	520				
2-Hexanone	ND	ug/kg	520				
Ethyl methacrylate	ND	ug/kg	520				
Acrolein	ND	ug/kg	1300				
Acrylonitrile	ND	ug/kg	520				
Bromochloromethane	ND	ug/kg	260				
Tetrahydrofuran	ND	ug/kg	1000				
2,2-Dichloropropane	ND	ug/kg	260				
1,2-Dibromoethane	ND	ug/kg	260				
1,3-Dichloropropane	ND	ug/kg	260				
1,1,1,2-Tetrachloroethane	ND	ug/kg	52.				
Bromobenzene	ND	ug/kg	260				
n-Butylbenzene	ND	ug/kg	52.				
sec-Butylbenzene	ND	ug/kg	52.				
tert-Butylbenzene	ND	ug/kg	260				
o-Chlorotoluene	ND	ug/kg	260				
p-Chlorotoluene	ND	ug/kg	260				
1,2-Dibromo-3-chloropropane	ND	ug/kg	260				
Hexachlorobutadiene	ND	ug/kg	260				
Isopropylbenzene	ND	ug/kg	52.				
p-Isopropyltoluene	ND	ug/kg	52.				
Naphthalene	ND	ug/kg	260				
n-Propylbenzene	ND	ug/kg	52.				
1,2,3-Trichlorobenzene	ND	ug/kg	260				
1,2,4-Trichlorobenzene	ND	ug/kg	260				
1,3,5-Trimethylbenzene	ND	ug/kg	260				
1,2,4-Trimethylbenzene	ND	ug/kg	260				
trans-1,4-Dichloro-2-butene	ND	ug/kg	260				
Ethyl ether	ND	ug/kg	260				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	118.	%	
Toluene-d8	107.	%	
4-Bromofluorobenzene	104.	%	
Dibromofluoromethane	99.0	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-06
GP-1-4-8'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1115 23:27	MS

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Were samples received in methanol? Yes (Covering the Soil)
Methanol ratio: 1:1 +/- 25%
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
VPH Standard analysis reports only range data with no adjustments.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	mg/kg	2.07
C9-C12 Aliphatics, Unadjusted	ND	mg/kg	2.07
C9-C10 Aromatics	ND	mg/kg	2.07

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	85.0	%	70-130
2,5-Dibromotoluene-FID	83.0	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-06
GP-1-4-8'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	1115 09:45	1118 20:35	PD

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	mg/kg	11.0
C19-C36 Aliphatics	ND	mg/kg	11.0
C11-C22 Aromatics, Unadjusted	ND	mg/kg	11.0
C11-C22 Aromatics, Adjusted	ND	mg/kg	11.0
Naphthalene	ND	mg/kg	0.549
2-Methylnaphthalene	ND	mg/kg	0.549
Acenaphthylene	ND	mg/kg	0.549
Acenaphthene	ND	mg/kg	0.549
Fluorene	ND	mg/kg	0.549
Phenanthrene	ND	mg/kg	0.549
Anthracene	ND	mg/kg	0.549
Fluoranthene	ND	mg/kg	0.549
Pyrene	ND	mg/kg	0.549
Benzo(a)anthracene	ND	mg/kg	0.549
Chrysene	ND	mg/kg	0.549
Benzo(b)fluoranthene	ND	mg/kg	0.549
Benzo(k)fluoranthene	ND	mg/kg	0.549
Benzo(a)pyrene	ND	mg/kg	0.549
Indeno(1,2,3-cd)Pyrene	ND	mg/kg	0.549
Dibenzo(a,h)anthracene	ND	mg/kg	0.549
Benzo(g,h,i)perylene	ND	mg/kg	0.549

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	63.0	%	40-140
o-Terphenyl	76.0	%	40-140
2-Fluorobiphenyl	75.0	%	40-140
2-Bromonaphthalene	66.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0211671-07
GP-2-8-12'
Sample Matrix: SOIL

Date Collected: 13-NOV-2002 11:30
Date Received : 14-NOV-2002
Date Reported : 21-NOV-2002

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber,1-Plastic,3-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	92.	%	0.10	30 2540G		1115 14:48	BW
Volatile Organics 8260 via Low	5035			1 8260B		1119 17:29	BT
Methylene chloride	ND	ug/kg	21.				
1,1-Dichloroethane	ND	ug/kg	3.1				
Chloroform	ND	ug/kg	3.1				
Carbon tetrachloride	ND	ug/kg	2.1				
1,2-Dichloropropane	ND	ug/kg	7.3				
Dibromochloromethane	ND	ug/kg	2.1				
1,1,2-Trichloroethane	ND	ug/kg	3.1				
Tetrachloroethene	ND	ug/kg	2.1				
Chlorobenzene	ND	ug/kg	2.1				
Trichlorofluoromethane	ND	ug/kg	10.				
1,2-Dichloroethane	ND	ug/kg	2.1				
1,1,1-Trichloroethane	ND	ug/kg	2.1				
Bromodichloromethane	ND	ug/kg	2.1				
trans-1,3-Dichloropropene	ND	ug/kg	2.1				
cis-1,3-Dichloropropene	ND	ug/kg	2.1				
1,1-Dichloropropene	ND	ug/kg	10.				
Bromoform	ND	ug/kg	8.4				
1,1,2,2-Tetrachloroethane	ND	ug/kg	2.1				
Benzene	ND	ug/kg	2.1				
Toluene	ND	ug/kg	3.1				
Ethylbenzene	ND	ug/kg	2.1				
Chloromethane	ND	ug/kg	10.				
Bromomethane	ND	ug/kg	4.2				
Vinyl chloride	ND	ug/kg	4.2				
Chloroethane	ND	ug/kg	4.2				
1,1-Dichloroethene	ND	ug/kg	2.1				
trans-1,2-Dichloroethene	ND	ug/kg	3.1				
Trichloroethene	ND	ug/kg	2.1				
1,2-Dichlorobenzene	ND	ug/kg	10.				
1,3-Dichlorobenzene	ND	ug/kg	10.				
1,4-Dichlorobenzene	ND	ug/kg	10.				
Methyl tert butyl ether	ND	ug/kg	4.2				
p/m-Xylene	ND	ug/kg	2.1				
o-Xylene	ND	ug/kg	2.1				
cis-1,2-Dichloroethene	ND	ug/kg	2.1				
Dibromomethane	ND	ug/kg	21.				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-07
GP-2-8-12'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics 8260 via Low 5035 continued				1 8260B		1119 17:29	BT
1,4-Dichlorobutane	ND	ug/kg	21.				
Iodomethane	ND	ug/kg	21.				
1,2,3-Trichloropropane	ND	ug/kg	21.				
Styrene	ND	ug/kg	2.1				
Dichlorodifluoromethane	ND	ug/kg	21.				
Acetone	ND	ug/kg	21.				
Carbon disulfide	ND	ug/kg	21.				
2-Butanone	ND	ug/kg	21.				
Vinyl acetate	ND	ug/kg	21.				
4-Methyl-2-pentanone	ND	ug/kg	21.				
2-Hexanone	ND	ug/kg	21.				
Ethyl methacrylate	ND	ug/kg	21.				
Acrolein	ND	ug/kg	52.				
Acrylonitrile	ND	ug/kg	21.				
Bromochloromethane	ND	ug/kg	10.				
Tetrahydrofuran	ND	ug/kg	42.				
2,2-Dichloropropane	ND	ug/kg	10.				
1,2-Dibromoethane	ND	ug/kg	10.				
1,3-Dichloropropane	ND	ug/kg	10.				
1,1,1,2-Tetrachloroethane	ND	ug/kg	2.1				
Bromobenzene	ND	ug/kg	10.				
n-Butylbenzene	ND	ug/kg	2.1				
sec-Butylbenzene	ND	ug/kg	2.1				
tert-Butylbenzene	ND	ug/kg	10.				
o-Chlorotoluene	ND	ug/kg	10.				
p-Chlorotoluene	ND	ug/kg	10.				
1,2-Dibromo-3-chloropropane	ND	ug/kg	10.				
Hexachlorobutadiene	ND	ug/kg	10.				
Isopropylbenzene	ND	ug/kg	2.1				
p-Isopropyltoluene	ND	ug/kg	2.1				
Naphthalene	ND	ug/kg	10.				
n-Propylbenzene	ND	ug/kg	2.1				
1,2,3-Trichlorobenzene	ND	ug/kg	10.				
1,2,4-Trichlorobenzene	ND	ug/kg	10.				
1,3,5-Trimethylbenzene	ND	ug/kg	10.				
1,2,4-Trimethylbenzene	ND	ug/kg	10.				
trans-1,4-Dichloro-2-butene	ND	ug/kg	10.				
Ethyl ether	ND	ug/kg	10.				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	118.	%	
Toluene-d8	110.	%	
4-Bromofluorobenzene	105.	%	
Dibromofluoromethane	101.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-07
GP-2-8-12'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1116 00:17	MH

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Were samples received in methanol? Yes (Covering the Soil)
Methanol ratio: 1:1 +/- 25%
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
VPH Standard analysis reports only range data with no adjustments.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	mg/kg	1.31
C9-C12 Aliphatics, Unadjusted	ND	mg/kg	1.31
C9-C10 Aromatics	ND	mg/kg	1.31

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	82.0	%	70-130
2,5-Dibromotoluene-FID	80.0	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-07
GP-2-8-12'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	1115 09:45	1118 23:52	PD

Quality Control Information

Condition of sample received:	Satisfactory
Sample temperature upon receipt:	Received on Ice
Sample extraction method:	Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed?	YES
Were all performance/acceptance standards for the required procedures achieved?	YES
Were significant modifications made to the method as specified in Sect 11.3?	NO

Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	mg/kg	10.9
C19-C36 Aliphatics	ND	mg/kg	10.9
C11-C22 Aromatics, Unadjusted	ND	mg/kg	10.9
C11-C22 Aromatics, Adjusted	ND	mg/kg	10.9
Naphthalene	ND	mg/kg	0.543
2-Methylnaphthalene	ND	mg/kg	0.543
Acenaphthylene	ND	mg/kg	0.543
Acenaphthene	ND	mg/kg	0.543
Fluorene	ND	mg/kg	0.543
Phenanthrene	ND	mg/kg	0.543
Anthracene	ND	mg/kg	0.543
Fluoranthene	ND	mg/kg	0.543
Pyrene	ND	mg/kg	0.543
Benzo(a)anthracene	ND	mg/kg	0.543
Chrysene	ND	mg/kg	0.543
Benzo(b)fluoranthene	ND	mg/kg	0.543
Benzo(k)fluoranthene	ND	mg/kg	0.543
Benzo(a)pyrene	ND	mg/kg	0.543
Indeno(1,2,3-cd)Pyrene	ND	mg/kg	0.543
Dibenzo(a,h)anthracene	ND	mg/kg	0.543
Benzo(g,h,i)perylene	ND	mg/kg	0.543

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	80.0	%	40-140
o-Terphenyl	79.0	%	40-140
2-Fluorobiphenyl	78.0	%	40-140
2-Bromonaphthalene	75.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0211671-08
GP-3-4-8'
Sample Matrix: SOIL

Date Collected: 13-NOV-2002 12:55
Date Received : 14-NOV-2002
Date Reported : 21-NOV-2002

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber,1-Plastic,3-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	96.	%	0.10	30 2540G		1115 14:48	BW
Volatile Organics 8260 via Low 5035				1 8260B		1119 19:00	BT
Methylene chloride	ND	ug/kg	22.				
1,1-Dichloroethane	ND	ug/kg	3.2				
Chloroform	ND	ug/kg	3.2				
Carbon tetrachloride	ND	ug/kg	2.2				
1,2-Dichloropropane	ND	ug/kg	7.6				
Dibromochloromethane	ND	ug/kg	2.2				
1,1,2-Trichloroethane	ND	ug/kg	3.2				
Tetrachloroethene	ND	ug/kg	2.2				
Chlorobenzene	ND	ug/kg	2.2				
Trichlorofluoromethane	ND	ug/kg	11.				
1,2-Dichloroethane	ND	ug/kg	2.2				
1,1,1-Trichloroethane	ND	ug/kg	2.2				
Bromodichloromethane	ND	ug/kg	2.2				
trans-1,3-Dichloropropene	ND	ug/kg	2.2				
cis-1,3-Dichloropropene	ND	ug/kg	2.2				
1,1-Dichloropropene	ND	ug/kg	11.				
Bromoform	ND	ug/kg	8.7				
1,1,2,2-Tetrachloroethane	ND	ug/kg	2.2				
Benzene	ND	ug/kg	2.2				
Toluene	ND	ug/kg	3.2				
Ethylbenzene	ND	ug/kg	2.2				
Chloromethane	ND	ug/kg	11.				
Bromomethane	ND	ug/kg	4.3				
Vinyl chloride	ND	ug/kg	4.3				
Chloroethane	ND	ug/kg	4.3				
1,1-Dichloroethene	ND	ug/kg	2.2				
trans-1,2-Dichloroethene	ND	ug/kg	3.2				
Trichloroethene	ND	ug/kg	2.2				
1,2-Dichlorobenzene	ND	ug/kg	11.				
1,3-Dichlorobenzene	ND	ug/kg	11.				
1,4-Dichlorobenzene	ND	ug/kg	11.				
Methyl tert butyl ether	ND	ug/kg	4.3				
p/m-Xylene	ND	ug/kg	2.2				
o-Xylene	ND	ug/kg	2.2				
cis-1,2-Dichloroethene	ND	ug/kg	2.2				
Dibromomethane	ND	ug/kg	22.				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-08
GP-3-4-8'

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics 8260 via Low 5035 continued				1	8260B		1119 19:00	ET
1,4-Dichlorobutane	ND	ug/kg	22.					
Iodomethane	ND	ug/kg	22.					
1,2,3-Trichloropropane	ND	ug/kg	22.					
Styrene	ND	ug/kg	2.2					
Dichlorodifluoromethane	ND	ug/kg	22.					
Acetone	ND	ug/kg	22.					
Carbon disulfide	ND	ug/kg	22.					
2-Butanone	ND	ug/kg	22.					
Vinyl acetate	ND	ug/kg	22.					
4-Methyl-2-pentanone	ND	ug/kg	22.					
2-Hexanone	ND	ug/kg	22.					
Ethyl methacrylate	ND	ug/kg	22.					
Acrolein	ND	ug/kg	54.					
Acrylonitrile	ND	ug/kg	22.					
Bromochloromethane	ND	ug/kg	11.					
Tetrahydrofuran	ND	ug/kg	43.					
2,2-Dichloropropane	ND	ug/kg	11.					
1,2-Dibromoethane	ND	ug/kg	11.					
1,3-Dichloropropane	ND	ug/kg	11.					
1,1,1,2-Tetrachloroethane	ND	ug/kg	2.2					
Bromobenzene	ND	ug/kg	11.					
n-Butylbenzene	ND	ug/kg	2.2					
sec-Butylbenzene	ND	ug/kg	2.2					
tert-Butylbenzene	ND	ug/kg	11.					
o-Chlorotoluene	ND	ug/kg	11.					
p-Chlorotoluene	ND	ug/kg	11.					
1,2-Dibromo-3-chloropropane	ND	ug/kg	11.					
Hexachlorobutadiene	ND	ug/kg	11.					
Isopropylbenzene	ND	ug/kg	2.2					
p-Isopropyltoluene	ND	ug/kg	2.2					
Naphthalene	ND	ug/kg	11.					
n-Propylbenzene	ND	ug/kg	2.2					
1,2,3-Trichlorobenzene	ND	ug/kg	11.					
1,2,4-Trichlorobenzene	ND	ug/kg	11.					
1,3,5-Trimethylbenzene	ND	ug/kg	11.					
1,2,4-Trimethylbenzene	ND	ug/kg	11.					
trans-1,4-Dichloro-2-butene	ND	ug/kg	11.					
Ethyl ether	ND	ug/kg	11.					

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	118.	%	
Toluene-d8	97.0	%	
4-Bromofluorobenzene	104.	%	
Dibromofluoromethane	100.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-08
GP-3-4-8'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1116 01:08	MH

Quality Control Information

Condition of sample received:	Satisfactory
Sample temperature upon receipt:	Received on Ice
Were samples received in methanol?	Yes (Covering the Soil)
Methanol ratio:	1:1 +/- 25%

Were all QA/QC procedures REQUIRED by the method followed?	YES
Were all performance/acceptance standards for the required procedures achieved?	YES
Were significant modifications made to the method as specified in Sect 11.3?	NO

Please note to subtract the method blank from the stated result.
VPH Standard analysis reports only range data with no adjustments.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	mg/kg	2.17
C9-C12 Aliphatics, Unadjusted	ND	mg/kg	2.17
C9-C10 Aromatics	ND	mg/kg	2.17

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	77.0	%	70-130
2,5-Dibromotoluene-FID	78.0	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-08
GP-3-4-8'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	1115 09:45	1119 00:41	PD

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	mg/kg	10.4
C19-C36 Aliphatics	ND	mg/kg	10.4
C11-C22 Aromatics, Unadjusted	ND	mg/kg	10.4
C11-C22 Aromatics, Adjusted	ND	mg/kg	10.4
Naphthalene	ND	mg/kg	0.521
2-Methylnaphthalene	ND	mg/kg	0.521
Acenaphthylene	ND	mg/kg	0.521
Acenaphthene	ND	mg/kg	0.521
Fluorene	ND	mg/kg	0.521
Phenanthrene	ND	mg/kg	0.521
Anthracene	ND	mg/kg	0.521
Fluoranthene	ND	mg/kg	0.521
Pyrene	ND	mg/kg	0.521
Benzo(a)anthracene	ND	mg/kg	0.521
Chrysene	ND	mg/kg	0.521
Benzo(b)fluoranthene	ND	mg/kg	0.521
Benzo(k)fluoranthene	ND	mg/kg	0.521
Benzo(a)pyrene	ND	mg/kg	0.521
Indeno(1,2,3-cd)Pyrene	ND	mg/kg	0.521
Dibenzo(a,h)anthracene	ND	mg/kg	0.521
Benzo(g,h,i)perylene	ND	mg/kg	0.521

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	82.0	%	40-140
o-Terphenyl	88.0	%	40-140
2-Fluorobiphenyl	83.0	%	40-140
2-Bromonaphthalene	76.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0211671-09
GP-4-8-12'
Sample Matrix: SOIL

Date Collected: 13-NOV-2002 14:00
Date Received : 14-NOV-2002
Date Reported : 21-NOV-2002

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber,1-Plastic,3-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	92.	%	0.10	30 2540G		1115 14:48	BW
Volatile Organics 8260 via High 5035				1 8260B		1120 19:05	BT
Methylene chloride	ND	ug/kg	690				
1,1-Dichloroethane	ND	ug/kg	100				
Chloroform	ND	ug/kg	100				
Carbon tetrachloride	ND	ug/kg	69.				
1,2-Dichloropropane	ND	ug/kg	240				
Dibromochloromethane	ND	ug/kg	69.				
1,1,2-Trichloroethane	ND	ug/kg	100				
Tetrachloroethene	ND	ug/kg	69.				
Chlorobenzene	ND	ug/kg	69.				
Trichlorofluoromethane	ND	ug/kg	340				
1,2-Dichloroethane	ND	ug/kg	69.				
1,1,1-Trichloroethane	ND	ug/kg	69.				
Bromodichloromethane	ND	ug/kg	69.				
trans-1,3-Dichloropropene	ND	ug/kg	69.				
cis-1,3-Dichloropropene	ND	ug/kg	69.				
1,1-Dichloropropene	ND	ug/kg	340				
Bromoform	ND	ug/kg	280				
1,1,2,2-Tetrachloroethane	ND	ug/kg	69.				
Benzene	ND	ug/kg	69.				
Toluene	ND	ug/kg	100				
Ethylbenzene	ND	ug/kg	69.				
Chloromethane	ND	ug/kg	340				
Bromomethane	ND	ug/kg	140				
Vinyl chloride	ND	ug/kg	140				
Chloroethane	ND	ug/kg	140				
1,1-Dichloroethene	ND	ug/kg	69.				
trans-1,2-Dichloroethene	ND	ug/kg	100				
Trichloroethene	ND	ug/kg	69.				
1,2-Dichlorobenzene	ND	ug/kg	340				
1,3-Dichlorobenzene	ND	ug/kg	340				
1,4-Dichlorobenzene	ND	ug/kg	340				
Methyl tert butyl ether	ND	ug/kg	140				
p/m-Xylene	ND	ug/kg	69.				
o-Xylene	ND	ug/kg	69.				
cis-1,2-Dichloroethene	ND	ug/kg	69.				
Dibromomethane	ND	ug/kg	690				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-09
GP-4-8-12'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics 8260 via High 5035 continued				1 8260B		1120 19:05	BT
1,4-Dichlorobutane	ND	ug/kg	690				
Iodomethane	ND	ug/kg	690				
1,2,3-Trichloropropane	ND	ug/kg	690				
Styrene	ND	ug/kg	69.				
Dichlorodifluoromethane	ND	ug/kg	690				
Acetone	ND	ug/kg	690				
Carbon disulfide	ND	ug/kg	690				
2-Butanone	ND	ug/kg	690				
Vinyl acetate	ND	ug/kg	690				
4-Methyl-2-pentanone	ND	ug/kg	690				
2-Hexanone	ND	ug/kg	690				
Ethyl methacrylate	ND	ug/kg	690				
Acrolein	ND	ug/kg	1700				
Acrylonitrile	ND	ug/kg	690				
Bromochloromethane	ND	ug/kg	340				
Tetrahydrofuran	ND	ug/kg	1400				
2,2-Dichloropropane	ND	ug/kg	340				
1,2-Dibromoethane	ND	ug/kg	340				
1,3-Dichloropropane	ND	ug/kg	340				
1,1,1,2-Tetrachloroethane	ND	ug/kg	69.				
Bromobenzene	ND	ug/kg	340				
n-Butylbenzene	ND	ug/kg	69.				
sec-Butylbenzene	ND	ug/kg	69.				
tert-Butylbenzene	ND	ug/kg	340				
o-Chlorotoluene	ND	ug/kg	340				
p-Chlorotoluene	ND	ug/kg	340				
1,2-Dibromo-3-chloropropane	ND	ug/kg	340				
Hexachlorobutadiene	ND	ug/kg	340				
Isopropylbenzene	ND	ug/kg	69.				
p-Isopropyltoluene	ND	ug/kg	69.				
Naphthalene	ND	ug/kg	340				
n-Propylbenzene	ND	ug/kg	69.				
1,2,3-Trichlorobenzene	ND	ug/kg	340				
1,2,4-Trichlorobenzene	ND	ug/kg	340				
1,3,5-Trimethylbenzene	ND	ug/kg	340				
1,2,4-Trimethylbenzene	ND	ug/kg	340				
trans-1,4-Dichloro-2-butene	ND	ug/kg	340				
Ethyl ether	ND	ug/kg	340				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	110.	%	
Toluene-d8	107.	%	
4-Bromofluorobenzene	95.0	%	
Dibromofluoromethane	95.0	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-09
GP-4-8-12'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47-98-1		1116 01:58	MM

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Were samples received in methanol? Yes (Covering the Soil)
Methanol ratio: 1:1 +/- 25%
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
VPH Standard analysis reports only range data with no adjustments.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	mg/kg	2.76
C9-C12 Aliphatics, Unadjusted	ND	mg/kg	2.76
C9-C10 Aromatics	ND	mg/kg	2.76

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	79.0	%	70-130
2,5-Dibromotoluene-FID	77.0	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-09
GP-4-8-12'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	1115 09:45	1119 01:30	PD

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	mg/kg	10.9
C19-C36 Aliphatics	ND	mg/kg	10.9
C11-C22 Aromatics, Unadjusted	ND	mg/kg	10.9
C11-C22 Aromatics, Adjusted	ND	mg/kg	10.9
Naphthalene	ND	mg/kg	0.543
2-Methylnaphthalene	ND	mg/kg	0.543
Acenaphthylene	ND	mg/kg	0.543
Acenaphthene	ND	mg/kg	0.543
Fluorene	ND	mg/kg	0.543
Phenanthrene	ND	mg/kg	0.543
Anthracene	ND	mg/kg	0.543
Fluoranthene	ND	mg/kg	0.543
Pyrene	ND	mg/kg	0.543
Benzo(a)anthracene	ND	mg/kg	0.543
Chrysene	ND	mg/kg	0.543
Benzo(b)fluoranthene	ND	mg/kg	0.543
Benzo(k)fluoranthene	ND	mg/kg	0.543
Benzo(a)pyrene	ND	mg/kg	0.543
Indeno(1,2,3-cd)Pyrene	ND	mg/kg	0.543
Dibenzo(a,h)anthracene	ND	mg/kg	0.543
Benzo(g,h,i)perylene	ND	mg/kg	0.543

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	82.0	%	40-140
o-Terphenyl	97.0	%	40-140
2-Fluorobiphenyl	93.0	%	40-140
2-Bromonaphthalene	92.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0211671-10
GP-5-4-8'
Sample Matrix: SOIL

Date Collected: 13-NOV-2002 14:50
Date Received : 14-NOV-2002
Date Reported : 21-NOV-2002

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber,1-Plastic,3-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	92.	%	0.10	30 2540G		1115 14:48	BW
Volatile Organics 8260 via High 5035				1 8260B		1120 19:51	BT
Methylene chloride	ND	ug/kg	480				
1,1-Dichloroethane	ND	ug/kg	72.				
Chloroform	ND	ug/kg	72.				
Carbon tetrachloride	ND	ug/kg	48.				
1,2-Dichloropropane	ND	ug/kg	170				
Dibromochloromethane	ND	ug/kg	48.				
1,1,2-Trichloroethane	ND	ug/kg	72.				
Tetrachloroethene	ND	ug/kg	48.				
Chlorobenzene	ND	ug/kg	48.				
Trichlorofluoromethane	ND	ug/kg	240				
1,2-Dichloroethane	ND	ug/kg	48.				
1,1,1-Trichloroethane	ND	ug/kg	48.				
Bromodichloromethane	ND	ug/kg	48.				
trans-1,3-Dichloropropene	ND	ug/kg	48.				
cis-1,3-Dichloropropene	ND	ug/kg	48.				
1,1-Dichloropropene	ND	ug/kg	240				
Bromoform	ND	ug/kg	190				
1,1,2,2-Tetrachloroethane	ND	ug/kg	48.				
Benzene	ND	ug/kg	48.				
Toluene	ND	ug/kg	72.				
Ethylbenzene	ND	ug/kg	48.				
Chloromethane	ND	ug/kg	240				
Bromomethane	ND	ug/kg	95.				
Vinyl chloride	ND	ug/kg	95.				
Chloroethane	ND	ug/kg	95.				
1,1-Dichloroethene	ND	ug/kg	48.				
trans-1,2-Dichloroethene	ND	ug/kg	72.				
Trichloroethene	ND	ug/kg	48.				
1,2-Dichlorobenzene	ND	ug/kg	240				
1,3-Dichlorobenzene	ND	ug/kg	240				
1,4-Dichlorobenzene	ND	ug/kg	240				
Methyl tert butyl ether	ND	ug/kg	95.				
p/m-Xylene	ND	ug/kg	48.				
o-Xylene	ND	ug/kg	48.				
cis-1,2-Dichloroethene	ND	ug/kg	48.				
Dibromomethane	ND	ug/kg	480				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-10
GP-5-4-8'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics 8260 via High 5035 continued				1 8260B		1120 19:51	BT
1,4-Dichlorobutane	ND	ug/kg	480				
Iodomethane	ND	ug/kg	480				
1,2,3-Trichloropropane	ND	ug/kg	480				
Styrene	ND	ug/kg	48.				
Dichlorodifluoromethane	ND	ug/kg	480				
Acetone	ND	ug/kg	480				
Carbon disulfide	ND	ug/kg	480				
2-Butanone	ND	ug/kg	480				
Vinyl acetate	ND	ug/kg	480				
4-Methyl-2-pentanone	ND	ug/kg	480				
2-Hexanone	ND	ug/kg	480				
Ethyl methacrylate	ND	ug/kg	480				
Acrolein	ND	ug/kg	1200				
Acrylonitrile	ND	ug/kg	480				
Bromochloromethane	ND	ug/kg	240				
Tetrahydrofuran	ND	ug/kg	950				
2,2-Dichloropropane	ND	ug/kg	240				
1,2-Dibromoethane	ND	ug/kg	240				
1,3-Dichloropropane	ND	ug/kg	240				
1,1,1,2-Tetrachloroethane	ND	ug/kg	48.				
Bromobenzene	ND	ug/kg	240				
n-Butylbenzene	ND	ug/kg	48.				
sec-Butylbenzene	ND	ug/kg	48.				
tert-Butylbenzene	ND	ug/kg	240				
o-Chlorotoluene	ND	ug/kg	240				
p-Chlorotoluene	ND	ug/kg	240				
1,2-Dibromo-3-chloropropane	ND	ug/kg	240				
Hexachlorobutadiene	ND	ug/kg	240				
Isopropylbenzene	ND	ug/kg	48.				
p-Isopropyltoluene	ND	ug/kg	48.				
Naphthalene	ND	ug/kg	240				
n-Propylbenzene	ND	ug/kg	48.				
1,2,3-Trichlorobenzene	ND	ug/kg	240				
1,2,4-Trichlorobenzene	ND	ug/kg	240				
1,3,5-Trimethylbenzene	ND	ug/kg	240				
1,2,4-Trimethylbenzene	ND	ug/kg	240				
trans-1,4-Dichloro-2-butene	ND	ug/kg	240				
Ethyl ether	ND	ug/kg	240				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	112.	%	
Toluene-d8	109.	%	
4-Bromofluorobenzene	102.	%	
Dibromofluoromethane	95.0	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-10
GP-5-4-8'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1116 02:48	MM

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Were samples received in methanol? Yes (Covering the Soil)
Methanol ratio: 1:1 +/- 25%
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
VPH Standard analysis reports only range data with no adjustments.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	mg/kg	1.91
C9-C12 Aliphatics, Unadjusted	ND	mg/kg	1.91
C9-C10 Aromatics	ND	mg/kg	1.91

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	71.0	%	70-130
2,5-Dibromotoluene-FID	71.0	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-10
GP-5-4-8'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	1115 09:45	1119 02:18	PD

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	mg/kg	10.9
C19-C36 Aliphatics	ND	mg/kg	10.9
C11-C22 Aromatics, Unadjusted	ND	mg/kg	10.9
C11-C22 Aromatics, Adjusted	ND	mg/kg	10.9
Naphthalene	ND	mg/kg	0.543
2-Methylnaphthalene	ND	mg/kg	0.543
Acenaphthylene	ND	mg/kg	0.543
Acenaphthene	ND	mg/kg	0.543
Fluorene	ND	mg/kg	0.543
Phenanthrene	ND	mg/kg	0.543
Anthracene	ND	mg/kg	0.543
Fluoranthene	ND	mg/kg	0.543
Pyrene	ND	mg/kg	0.543
Benzo(a)anthracene	ND	mg/kg	0.543
Chrysene	ND	mg/kg	0.543
Benzo(b)fluoranthene	ND	mg/kg	0.543
Benzo(k)fluoranthene	ND	mg/kg	0.543
Benzo(a)pyrene	ND	mg/kg	0.543
Indeno(1,2,3-cd)Pyrene	ND	mg/kg	0.543
Dibenzo(a,h)anthracene	ND	mg/kg	0.543
Benzo(g,h,i)perylene	ND	mg/kg	0.543

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	80.0	%	40-140
o-Terphenyl	80.0	%	40-140
2-Fluorobiphenyl	69.0	%	40-140
2-Bromonaphthalene	68.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0211671-11 TRIP BLANK
Sample Matrix: SOIL

Date Collected: 11-NOV-2002 18:00
Date Received : 14-NOV-2002
Date Reported : 21-NOV-2002

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Vial

Comments:
Results are reported on an 'AS RECEIVED' basis.

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics 8260 via Low 5035				1	8260B		1119 21:16	BT
Methylene chloride	ND	ug/kg	10.					
1,1-Dichloroethane	ND	ug/kg	1.5					
Chloroform	ND	ug/kg	1.5					
Carbon tetrachloride	ND	ug/kg	1.0					
1,2-Dichloropropane	ND	ug/kg	3.5					
Dibromochloromethane	ND	ug/kg	1.0					
1,1,2-Trichloroethane	ND	ug/kg	1.5					
Tetrachloroethene	ND	ug/kg	1.0					
Chlorobenzene	ND	ug/kg	1.0					
Trichlorofluoromethane	ND	ug/kg	5.0					
1,2-Dichloroethane	ND	ug/kg	1.0					
1,1,1-Trichloroethane	ND	ug/kg	1.0					
Bromodichloromethane	ND	ug/kg	1.0					
trans-1,3-Dichloropropene	ND	ug/kg	1.0					
cis-1,3-Dichloropropene	ND	ug/kg	1.0					
1,1-Dichloropropene	ND	ug/kg	5.0					
Bromoform	ND	ug/kg	4.0					
1,1,2,2-Tetrachloroethane	ND	ug/kg	1.0					
Benzene	ND	ug/kg	1.0					
Toluene	ND	ug/kg	1.5					
Ethylbenzene	ND	ug/kg	1.0					
Chloromethane	ND	ug/kg	5.0					
Bromomethane	ND	ug/kg	2.0					
Vinyl chloride	ND	ug/kg	2.0					
Chloroethane	ND	ug/kg	2.0					
1,1-Dichloroethene	ND	ug/kg	1.0					
trans-1,2-Dichloroethene	ND	ug/kg	1.5					
Trichloroethene	ND	ug/kg	1.0					
1,2-Dichlorobenzene	ND	ug/kg	5.0					
1,3-Dichlorobenzene	ND	ug/kg	5.0					
1,4-Dichlorobenzene	ND	ug/kg	5.0					
Methyl tert butyl ether	ND	ug/kg	2.0					
p/m-Xylene	ND	ug/kg	1.0					
o-Xylene	ND	ug/kg	1.0					
cis-1,2-Dichloroethene	ND	ug/kg	1.0					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-11
TRIP BLANK

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics 8260 via Low 5035 continued				1 8260B		1119 21:16	BT
Dibromomethane	ND	ug/kg	10.				
1,4-Dichlorobutane	ND	ug/kg	10.				
Iodomethane	ND	ug/kg	10.				
1,2,3-Trichloropropane	ND	ug/kg	10.				
Styrene	ND	ug/kg	1.0				
Dichlorodifluoromethane	ND	ug/kg	10.				
Acetone	ND	ug/kg	10.				
Carbon disulfide	ND	ug/kg	10.				
2-Butanone	ND	ug/kg	10.				
Vinyl acetate	ND	ug/kg	10.				
4-Methyl-2-pentanone	ND	ug/kg	10.				
2-Hexanone	ND	ug/kg	10.				
Ethyl methacrylate	ND	ug/kg	10.				
Acrolein	ND	ug/kg	25.				
Acrylonitrile	ND	ug/kg	10.				
Bromochloromethane	ND	ug/kg	5.0				
Tetrahydrofuran	ND	ug/kg	20.				
2,2-Dichloropropane	ND	ug/kg	5.0				
1,2-Dibromoethane	ND	ug/kg	5.0				
1,3-Dichloropropane	ND	ug/kg	5.0				
1,1,1,2-Tetrachloroethane	ND	ug/kg	1.0				
Bromobenzene	ND	ug/kg	5.0				
n-Butylbenzene	ND	ug/kg	1.0				
sec-Butylbenzene	ND	ug/kg	1.0				
tert-Butylbenzene	ND	ug/kg	5.0				
o-Chlorotoluene	ND	ug/kg	5.0				
p-Chlorotoluene	ND	ug/kg	5.0				
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.0				
Hexachlorobutadiene	ND	ug/kg	5.0				
Isopropylbenzene	ND	ug/kg	1.0				
p-Isopropyltoluene	ND	ug/kg	1.0				
Naphthalene	ND	ug/kg	5.0				
n-Propylbenzene	ND	ug/kg	1.0				
1,2,3-Trichlorobenzene	ND	ug/kg	5.0				
1,2,4-Trichlorobenzene	ND	ug/kg	5.0				
1,3,5-Trimethylbenzene	ND	ug/kg	5.0				
1,2,4-Trimethylbenzene	ND	ug/kg	5.0				
trans-1,4-Dichloro-2-butene	ND	ug/kg	5.0				
Ethyl ether	ND	ug/kg	5.0				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	124.	%	
Toluene-d8	106.	%	
4-Bromofluorobenzene	106.	%	
Dibromofluoromethane	102.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0211671-12
TRIP BLANK
Sample Matrix: WATER

Date Collected: 19-APR-2002 13:10
Date Received : 14-NOV-2002
Date Reported : 21-NOV-2002

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1115 17:33	MM

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
VPH Standard analysis reports only range data with no adjustments.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C10 Aromatics	ND	ug/l	40.0

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	88.0	%	70-130
2,5-Dibromotoluene-FID	88.0	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0211671-13
TRIP BLANK
Sample Matrix: WATER

Date Collected: 14-NOV-2002 15:00
Date Received : 14-NOV-2002
Date Reported : 21-NOV-2002

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260				1 8260B		1118 20:54	AR
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
1,1-Dichloropropene	ND	ug/l	2.5				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Benzene	ND	ug/l	0.50				
Toluene	ND	ug/l	0.75				
Ethylbenzene	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
p/m-Xylene	ND	ug/l	0.50				
o-Xylene	ND	ug/l	0.50				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,4-Dichlorobutane	ND	ug/l	5.0				
Iodomethane	ND	ug/l	5.0				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211671-13
TRIP BLANK

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260 continued				1 8260B		1118 20:54	AR
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
Vinyl acetate	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				
Ethyl methacrylate	ND	ug/l	5.0				
Acrolein	ND	ug/l	12.				
Acrylonitrile	ND	ug/l	5.0				
Bromochloromethane	ND	ug/l	2.5				
Tetrahydrofuran	ND	ug/l	10.				
2,2-Dichloropropane	ND	ug/l	2.5				
1,2-Dibromoethane	ND	ug/l	2.5				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
Bromobenzene	ND	ug/l	2.5				
n-Butylbenzene	ND	ug/l	0.50				
sec-Butylbenzene	ND	ug/l	0.50				
tert-Butylbenzene	ND	ug/l	2.5				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	2.5				
Isopropylbenzene	ND	ug/l	0.50				
p-Isopropyltoluene	ND	ug/l	0.50				
Naphthalene	ND	ug/l	2.5				
n-Propylbenzene	ND	ug/l	0.50				
1,2,3-Trichlorobenzene	ND	ug/l	2.5				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
1,3,5-Trimethylbenzene	ND	ug/l	2.5				
1,2,4-Trimethylbenzene	ND	ug/l	2.5				
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5				
Ethyl ether	ND	ug/l	2.5				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	109.	%	
Toluene-d8	100.	%	
4-Bromofluorobenzene	102.	%	
Dibromofluoromethane	108.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0211671

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Solids, Total for sample(s) 06-10 (L0211671-06, WG127679)					
Solids, Total	91.	92.	%	1	
Volatile Organics 8260 via Low 5035 for sample(s) 07-08,11 (L0211548-03, WG127649)					
Methylene chloride	ND	ND	ug/kg	NC	
1,1-Dichloroethane	ND	ND	ug/kg	NC	
Chloroform	ND	ND	ug/kg	NC	
Carbon tetrachloride	ND	ND	ug/kg	NC	
1,2-Dichloropropane	ND	ND	ug/kg	NC	
Dibromochloromethane	ND	ND	ug/kg	NC	
1,1,2-Trichloroethane	ND	ND	ug/kg	NC	
Tetrachloroethene	ND	ND	ug/kg	NC	
Chlorobenzene	ND	ND	ug/kg	NC	
Trichlorofluoromethane	ND	ND	ug/kg	NC	
1,2-Dichloroethane	ND	ND	ug/kg	NC	
1,1,1-Trichloroethane	ND	ND	ug/kg	NC	
Bromodichloromethane	ND	ND	ug/kg	NC	
trans-1,3-Dichloropropene	ND	ND	ug/kg	NC	
cis-1,3-Dichloropropene	ND	ND	ug/kg	NC	
1,1-Dichloropropene	ND	ND	ug/kg	NC	
Bromoform	ND	ND	ug/kg	NC	
1,1,2,2-Tetrachloroethane	ND	ND	ug/kg	NC	
Benzene	ND	ND	ug/kg	NC	
Toluene	ND	ND	ug/kg	NC	
Ethylbenzene	ND	ND	ug/kg	NC	
Chloromethane	ND	ND	ug/kg	NC	
Bromomethane	ND	ND	ug/kg	NC	
Vinyl chloride	ND	ND	ug/kg	NC	
Chloroethane	ND	ND	ug/kg	NC	
1,1-Dichloroethene	ND	ND	ug/kg	NC	
trans-1,2-Dichloroethene	ND	ND	ug/kg	NC	
Trichloroethene	ND	ND	ug/kg	NC	
1,2-Dichlorobenzene	ND	ND	ug/kg	NC	
1,3-Dichlorobenzene	ND	ND	ug/kg	NC	
1,4-Dichlorobenzene	ND	ND	ug/kg	NC	
Methyl tert butyl ether	ND	ND	ug/kg	NC	
p/m-Xylene	ND	ND	ug/kg	NC	
o-Xylene	ND	ND	ug/kg	NC	
cis-1,2-Dichloroethene	ND	ND	ug/kg	NC	
Dibromomethane	ND	ND	ug/kg	NC	
1,4-Dichlorobutane	ND	ND	ug/kg	NC	
Iodomethane	ND	ND	ug/kg	NC	
1,2,3-Trichloropropane	ND	ND	ug/kg	NC	
Styrene	ND	ND	ug/kg	NC	
Dichlorodifluoromethane	ND	ND	ug/kg	NC	
Acetone	ND	ND	ug/kg	NC	
Carbon disulfide	ND	ND	ug/kg	NC	
2-Butanone	ND	ND	ug/kg	NC	
Vinyl acetate	ND	ND	ug/kg	NC	

Laboratory Job Number: L0211671

Continued

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Volatile Organics 8260 via Low 5035 for sample(s) 07-08,11 (L0211548-03, WG127649)					
4-Methyl-2-pentanone	ND	ND	ug/kg	NC	
2-Hexanone	ND	ND	ug/kg	NC	
Ethyl methacrylate	ND	ND	ug/kg	NC	
Acrolein	ND	ND	ug/kg	NC	
Acrylonitrile	ND	ND	ug/kg	NC	
Bromochloromethane	ND	ND	ug/kg	NC	
Tetrahydrofuran	ND	ND	ug/kg	NC	
2,2-Dichloropropane	ND	ND	ug/kg	NC	
1,2-Dibromoethane	ND	ND	ug/kg	NC	
1,3-Dichloropropane	ND	ND	ug/kg	NC	
1,1,1,2-Tetrachloroethane	ND	ND	ug/kg	NC	
Bromobenzene	ND	ND	ug/kg	NC	
n-Butylbenzene	ND	ND	ug/kg	NC	
sec-Butylbenzene	ND	ND	ug/kg	NC	
tert-Butylbenzene	ND	ND	ug/kg	NC	
o-Chlorotoluene	ND	ND	ug/kg	NC	
p-Chlorotoluene	ND	ND	ug/kg	NC	
1,2-Dibromo-3-chloropropane	ND	ND	ug/kg	NC	
Hexachlorobutadiene	ND	ND	ug/kg	NC	
Isopropylbenzene	ND	ND	ug/kg	NC	
p-Isopropyltoluene	ND	ND	ug/kg	NC	
Naphthalene	ND	ND	ug/kg	NC	
n-Propylbenzene	ND	ND	ug/kg	NC	
1,2,3-Trichlorobenzene	ND	ND	ug/kg	NC	
1,2,4-Trichlorobenzene	ND	ND	ug/kg	NC	
1,3,5-Trimethylbenzene	ND	ND	ug/kg	NC	
1,2,4-Trimethylbenzene	ND	ND	ug/kg	NC	
trans-1,4-Dichloro-2-butene	ND	ND	ug/kg	NC	
Ethyl ether	ND	ND	ug/kg	NC	
Surrogate(s)	Recovery				QC Criteria
1,2-Dichloroethane-d4	121.	127.	%	5	
Toluene-d8	106.	111.	%	5	
4-Bromofluorobenzene	103.	104.	%	1	
Dibromofluoromethane	104.	108.	%	4	
Extractable Petroleum Hydrocarbons for sample(s) 01-02,04-05 (L0211659-01, WG127660)					
C9-C18 Aliphatics	ND	ND	ug/l	NC	50
C19-C36 Aliphatics	ND	ND	ug/l	NC	50
C11-C22 Aromatics	ND	ND	ug/l	NC	50
C11-C22 Aromatics, Adjusted	ND	ND	ug/l	NC	50
Naphthalene	ND	ND	ug/l	NC	50
2-Methylnaphthalene	ND	ND	ug/l	NC	50
Acenaphthylene	ND	ND	ug/l	NC	50
Acenaphthene	ND	ND	ug/l	NC	50
Fluorene	ND	ND	ug/l	NC	50
Phenanthrene	ND	ND	ug/l	NC	50
Anthracene	ND	ND	ug/l	NC	50

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0211671

Continued

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Extractable Petroleum Hydrocarbons for sample(s) 01-02,04-05 (L0211659-01, WG127660)					
Fluoranthene	ND	ND	ug/l	NC	50
Pyrene	ND	ND	ug/l	NC	50
Benzo(a)anthracene	ND	ND	ug/l	NC	50
Chrysene	ND	ND	ug/l	NC	50
Benzo(b)fluoranthene	ND	ND	ug/l	NC	50
Benzo(k)fluoranthene	ND	ND	ug/l	NC	50
Benzo(a)pyrene	ND	ND	ug/l	NC	50
Indeno(1,2,3-cd)Pyrene	ND	ND	ug/l	NC	50
Dibenzo(a,h)anthracene	ND	ND	ug/l	NC	50
Benzo(ghi)perylene	ND	ND	ug/l	NC	50
Surrogate(s)	Recovery				QC Criteria
Chloro-Octadecane	69.0	58.0	%	17	40-140
o-Terphenyl	77.0	60.0	%	25	40-140
2-Fluorobiphenyl	76.0	63.0	%	19	40-140
2-Bromonaphthalene	68.0	55.0	%	21	40-140
Volatile Petroleum Hydrocarbons for sample(s) 06-10 (L0211548-03, WG127534)					
C5-C8 Aliphatics	ND	ND	mg/kg	NC	50
C9-C12 Aliphatics	ND	ND	mg/kg	NC	50
C9-C10 Aromatics	ND	ND	mg/kg	NC	50
Surrogate(s)	Recovery				QC Criteria
2,5-Dibromotoluene-PID	87.0	93.0	%	7	70-130
2,5-Dibromotoluene-FID	87.0	88.0	%	1	70-130
Volatile Petroleum Hydrocarbons for sample(s) 01-02,05 (L0211671-05, WG127756)					
C5-C8 Aliphatics	ND	ND	ug/l	NC	50
C9-C12 Aliphatics	ND	ND	ug/l	NC	50
C9-C10 Aromatics	ND	ND	ug/l	NC	50
Surrogate(s)	Recovery				QC Criteria
2,5-Dibromotoluene-PID	87.0	84.0	%	4	70-130
2,5-Dibromotoluene-FID	84.0	79.0	%	6	70-130
Volatile Petroleum Hydrocarbons for sample(s) 03-04,12 (L0211612-01, WG127648)					
C5-C8 Aliphatics	ND	ND	ug/l	NC	50
C9-C12 Aliphatics	ND	ND	ug/l	NC	50
C9-C10 Aromatics	ND	ND	ug/l	NC	50
Surrogate(s)	Recovery				QC Criteria
2,5-Dibromotoluene-PID	105.	93.0	%	12	70-130
2,5-Dibromotoluene-FID	90.0	88.0	%	2	70-130
Extractable Petroleum Hydrocarbons for sample(s) 06-10 (L0211671-06, WG127645)					
C9-C18 Aliphatics	ND	ND	mg/kg	NC	50
C19-C36 Aliphatics	ND	ND	mg/kg	NC	50
C11-C22 Aromatics	ND	ND	mg/kg	NC	50

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0211671

Continued

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Extractable Petroleum Hydrocarbons for sample(s) 06-10 (L0211671-06, WG127645)					
C11-C22 Aromatics, Adjusted	ND	ND	mg/kg	NC	50
Naphthalene	ND	ND	mg/kg	NC	50
2-Methylnaphthalene	ND	ND	mg/kg	NC	50
Acenaphthylene	ND	ND	mg/kg	NC	50
Acenaphthene	ND	ND	mg/kg	NC	50
Fluorene	ND	ND	mg/kg	NC	50
Phenanthrene	ND	ND	mg/kg	NC	50
Anthracene	ND	ND	mg/kg	NC	50
Fluoranthene	ND	ND	mg/kg	NC	50
Pyrene	ND	ND	mg/kg	NC	50
Benzo(a)anthracene	ND	ND	mg/kg	NC	50
Chrysene	ND	ND	mg/kg	NC	50
Benzo(b)fluoranthene	ND	ND	mg/kg	NC	50
Benzo(k)fluoranthene	ND	ND	mg/kg	NC	50
Benzo(a)pyrene	ND	ND	mg/kg	NC	50
Indeno(1,2,3-cd)Pyrene	ND	ND	mg/kg	NC	50
Dibenzo(a,h)anthracene	ND	ND	mg/kg	NC	50
Benzo(ghi)perylene	ND	ND	mg/kg	NC	50
Surrogate(s)	Recovery				QC Criteria
Chloro-Octadecane	63.0	67.0	%	6	40-140
o-Terphenyl	76.0	81.0	%	6	40-140
2-Fluorobiphenyl	75.0	77.0	%	3	40-140
2-Bromonaphthalene	66.0	73.0	%	10	40-140

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0211671

Parameter	% Recovery	QC Criteria
Volatile Organics by GC/MS 8260 LCS for sample(s) 01-02,04-05,13 (WG127635)		
Chlorobenzene	101	
Benzene	108	
Toluene	99	
1,1-Dichloroethene	109	
Trichloroethene	106	
Surrogate(s)		
1,2-Dichloroethane-d4	110	
Toluene-d8	100	
4-Bromofluorobenzene	97	
Dibromofluoromethane	107	
Volatile Organics by GC/MS 8260 LCS for sample(s) 03 (WG127899)		
Chlorobenzene	101	
Benzene	108	
Toluene	99	
1,1-Dichloroethene	109	
Trichloroethene	106	
Surrogate(s)		
1,2-Dichloroethane-d4	110	
Toluene-d8	100	
4-Bromofluorobenzene	97	
Dibromofluoromethane	107	
Volatile Organics 8260 via Low 5035 LCS for sample(s) 07-08,11 (WG127649)		
Chlorobenzene	99	
Benzene	96	
Toluene	97	
1,1-Dichloroethene	97	
Trichloroethene	98	
Surrogate(s)		
1,2-Dichloroethane-d4	101	
Toluene-d8	99	
4-Bromofluorobenzene	95	
Dibromofluoromethane	96	
Volatile Organics 8260 via High 5035 LCS for sample(s) 06,09-10 (WG128116)		
Chlorobenzene	94	
Benzene	94	
Toluene	96	
1,1-Dichloroethene	98	
Trichloroethene	99	
Surrogate(s)		
1,2-Dichloroethane-d4	117	
Toluene-d8	101	

Laboratory Job Number: L0211671

Continued

Parameter	% Recovery	QC Criteria
Volatile Organics 8260 via High 5035 LCS for sample(s) 06,09-10 (WG128116)		
4-Bromofluorobenzene	97	
Dibromofluoromethane	104	
Extractable Petroleum Hydrocarbons LCS for sample(s) 01-02,04-05 (WG127660)		
Naphthalene	59	40-140
Acenaphthene	67	40-140
Anthracene	86	40-140
Pyrene	90	40-140
Chrysene	92	40-140
Nonane (C9)	54	40-140
Tetradecane (C14)	73	40-140
Nonadecane (C19)	86	40-140
Eicosane (C20)	85	40-140
Octacosane (C28)	87	40-140
Surrogate(s)		
Chloro-Octadecane	74	40-140
o-Terphenyl	89	40-140
2-Fluorobiphenyl	81	40-140
2-Bromonaphthalene	73	40-140
Volatile Petroleum Hydrocarbons LCS for sample(s) 06-10 (WG127534)		
Benzene	96	70-130
Toluene	85	70-130
Ethylbenzene	91	70-130
p/m-Xylene	86	70-130
o-Xylene	90	70-130
Methyl tert butyl ether	83	70-130
Naphthalene	74	70-130
Surrogate(s)		
2,5-Dibromotoluene-PID	87	70-130
2,5-Dibromotoluene-FID	81	70-130
Volatile Petroleum Hydrocarbons LCS for sample(s) 01-02,05 (WG127756)		
Benzene	105	70-130
Toluene	96	70-130
Ethylbenzene	103	70-130
p/m-Xylene	95	70-130
o-Xylene	99	70-130
Methyl tert butyl ether	98	70-130
Naphthalene	89	70-130
Surrogate(s)		
2,5-Dibromotoluene-PID	109	70-130
2,5-Dibromotoluene-FID	99	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0211671

Continued

Parameter	% Recovery	QC Criteria
Volatile Petroleum Hydrocarbons LCS for sample(s) 03-04,12 (WG127648)		
Benzene	101	70-130
Toluene	90	70-130
Ethylbenzene	99	70-130
p/m-Xylene	90	70-130
o-Xylene	94	70-130
Methyl tert butyl ether	99	70-130
Naphthalene	89	70-130
Surrogate(s)		
2,5-Dibromotoluene-PID	92	70-130
2,5-Dibromotoluene-FID	85	70-130
Extractable Petroleum Hydrocarbons LCS for sample(s) 06-10 (WG127645)		
Naphthalene	63	40-140
Acenaphthene	74	40-140
Anthracene	86	40-140
Pyrene	84	40-140
Chrysene	86	40-140
Nonane (C9)	54	40-140
Tetradecane (C14)	70	40-140
Nonadecane (C19)	75	40-140
Eicosane (C20)	76	40-140
Octacosane (C28)	78	40-140
Surrogate(s)		
Chloro-Octadecane	66	40-140
o-Terphenyl	83	40-140
2-Fluorobiphenyl	81	40-140
2-Bromonaphthalene	74	40-140

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

Laboratory Job Number: L0211671

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
Volatile Organics by GC/MS 8260 for sample(s) 01-02,04-05,13 (L0211611-03, WG127635)					
Chlorobenzene	104	89	16		
Benzene	108	92	17		
Toluene	101	83	20		
1,1-Dichloroethene	111	91	19		
Trichloroethene	103	86	18		
Surrogate(s)					
1,2-Dichloroethane-d4	112	111	1		
Toluene-d8	102	101	1		
4-Bromofluorobenzene	95	95	0		
Dibromofluoromethane	107	107	0		
Volatile Organics by GC/MS 8260 for sample(s) 03 (L0211671-03, WG127899)					
Chlorobenzene	108	100	8		
Benzene	118	106	11		
Toluene	108	95	13		
1,1-Dichloroethene	129	111	15		
Trichloroethene	112	99	13		
Surrogate(s)					
1,2-Dichloroethane-d4	112	109	3		
Toluene-d8	101	101	0		
4-Bromofluorobenzene	96	97	1		
Dibromofluoromethane	109	107	2		
Volatile Organics 8260 via High 5035 for sample(s) 06,09-10 (L0211671-10, WG128116)					
Chlorobenzene	94	89	6		
Benzene	97	90	7		
Toluene	97	92	6		
1,1-Dichloroethene	101	94	7		
Trichloroethene	100	94	6		
Surrogate(s)					
1,2-Dichloroethane-d4	112	102	9		
Toluene-d8	105	103	2		
4-Bromofluorobenzene	97	92	5		
Dibromofluoromethane	105	98	7		
Extractable Petroleum Hydrocarbons for sample(s) 01-02,04-05 (L0211659-01, WG127660)					
Naphthalene	48	40	18	50	40-140
Acenaphthene	62	54	15	50	40-140
Anthracene	79	78	1	50	40-140
Pyrene	84	82	3	50	40-140
Chrysene	86	84	2	50	40-140
Nonane (C9)	44	43	3	50	40-140
Tetradecane (C14)	69	66	6	50	40-140
Nonadecane (C19)	83	86	3	50	40-140
Eicosane (C20)	82	85	4	50	40-140

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

Laboratory Job Number: L0211671

Continued

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
Extractable Petroleum Hydrocarbons for sample(s) 01-02,04-05 (L0211659-01, WG127660)					
Octacosane (C28)	84	87	3	50	40-140
Surrogate(s)					
Chloro-Octadecane	65	74	13		40-140
o-Terphenyl	81	81	0		40-140
2-Fluorobiphenyl	75	71	5		40-140
2-Bromonaphthalene	68	61	11		40-140
Volatile Petroleum Hydrocarbons for sample(s) 06-10 (L0211548-03, WG127534)					
Methyl tert butyl ether	99	99	0	50	70-130
Benzene	106	110	4	50	70-130
Toluene	95	99	5	50	70-130
Ethylbenzene	104	104	0	50	70-130
p/m-Xylene	95	96	1	50	70-130
o-Xylene	99	103	4	50	70-130
Naphthalene	84	83	1	50	70-130
Surrogate(s)					
2,5-Dibromotoluene-PID	95	94	1		70-130
2,5-Dibromotoluene-FID	89	86	3		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0211671

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-02,04-05,13 (WG127635-10)							
Volatile Organics by GC/MS 8260				1 8260B		1118 16:22	AR
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
1,1-Dichloropropene	ND	ug/l	2.5				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Benzene	ND	ug/l	0.50				
Toluene	ND	ug/l	0.75				
Ethylbenzene	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
p/m-Xylene	ND	ug/l	0.50				
o-Xylene	ND	ug/l	0.50				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,4-Dichlorobutane	ND	ug/l	5.0				
Iodomethane	ND	ug/l	5.0				
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
Vinyl acetate	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0211671

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-02,04-05,13 (WG127635-10)							
Volatile Organics by GC/MS 8260 continued				1. 8260B		1118 16:22	AR
Ethyl methacrylate	ND	ug/l	5.0				
Acrolein	ND	ug/l	12.				
Acrylonitrile	ND	ug/l	5.0				
Bromochloromethane	ND	ug/l	2.5				
Tetrahydrofuran	ND	ug/l	10.				
2,2-Dichloropropane	ND	ug/l	2.5				
1,2-Dibromoethane	ND	ug/l	2.5				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
Bromobenzene	ND	ug/l	2.5				
n-Butylbenzene	ND	ug/l	0.50				
sec-Butylbenzene	ND	ug/l	0.50				
tert-Butylbenzene	ND	ug/l	2.5				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	2.5				
Isopropylbenzene	ND	ug/l	0.50				
p-Isopropyltoluene	ND	ug/l	0.50				
Naphthalene	ND	ug/l	2.5				
n-Propylbenzene	ND	ug/l	0.50				
1,2,3-Trichlorobenzene	ND	ug/l	2.5				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
1,3,5-Trimethylbenzene	ND	ug/l	2.5				
1,2,4-Trimethylbenzene	ND	ug/l	2.5				
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5				
Ethyl ether	ND	ug/l	2.5				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	109.	%					
Toluene-d8	100.	%					
4-Bromofluorobenzene	100.	%					
Dibromofluoromethane	107.	%					
Blank Analysis for sample(s) 03 (WG127899-4)							
Volatile Organics by GC/MS 8260				1 8260B		1118 16:22	AR
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0211671

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 03 (WG127899-4)							
Volatile Organics by GC/MS 8260 continued				1 8260B		1118 16:22	AR
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
1,1-Dichloropropene	ND	ug/l	2.5				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Benzene	ND	ug/l	0.50				
Toluene	ND	ug/l	0.75				
Ethylbenzene	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
p/m-Xylene	ND	ug/l	0.50				
o-Xylene	ND	ug/l	0.50				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,4-Dichlorobutane	ND	ug/l	5.0				
Iodomethane	ND	ug/l	5.0				
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
Vinyl acetate	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				
Ethyl methacrylate	ND	ug/l	5.0				
Acrolein	ND	ug/l	12.				
Acrylonitrile	ND	ug/l	5.0				
Bromochloromethane	ND	ug/l	2.5				
Tetrahydrofuran	ND	ug/l	10.				
2,2-Dichloropropane	ND	ug/l	2.5				
1,2-Dibromoethane	ND	ug/l	2.5				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
Bromobenzene	ND	ug/l	2.5				
n-Butylbenzene	ND	ug/l	0.50				

Laboratory Job Number: L0211671

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 03 (WG127899-4)							
Volatile Organics by GC/MS 8260 continued				1 8260B		1118 16:22 AR	
sec-Butylbenzene	ND	ug/l	0.50				
tert-Butylbenzene	ND	ug/l	2.5				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	2.5				
Isopropylbenzene	ND	ug/l	0.50				
p-Isopropyltoluene	ND	ug/l	0.50				
Naphthalene	ND	ug/l	2.5				
n-Propylbenzene	ND	ug/l	0.50				
1,2,3-Trichlorobenzene	ND	ug/l	2.5				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
1,3,5-Trimethylbenzene	ND	ug/l	2.5				
1,2,4-Trimethylbenzene	ND	ug/l	2.5				
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5				
Ethyl ether	ND	ug/l	2.5				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	109.	%					
Toluene-d8	100.	%					
4-Bromofluorobenzene	100.	%					
Dibromofluoromethane	107.	%					
Blank Analysis for sample(s) 07-08,11 (WG127649-9)							
Volatile Organics 8260 via Low 5035				1 8260B		1119 15:12 BT	
Methylene chloride	ND	ug/kg	10.				
1,1-Dichloroethane	ND	ug/kg	1.5				
Chloroform	ND	ug/kg	1.5				
Carbon tetrachloride	ND	ug/kg	1.0				
1,2-Dichloropropane	ND	ug/kg	3.5				
Dibromochloromethane	ND	ug/kg	1.0				
1,1,2-Trichloroethane	ND	ug/kg	1.5				
Tetrachloroethene	ND	ug/kg	1.0				
Chlorobenzene	ND	ug/kg	1.0				
Trichlorofluoromethane	ND	ug/kg	5.0				
1,2-Dichloroethane	ND	ug/kg	1.0				
1,1,1-Trichloroethane	ND	ug/kg	1.0				
Bromodichloromethane	ND	ug/kg	1.0				
trans-1,3-Dichloropropene	ND	ug/kg	1.0				
cis-1,3-Dichloropropene	ND	ug/kg	1.0				
1,1-Dichloropropene	ND	ug/kg	5.0				
Bromoform	ND	ug/kg	4.0				
1,1,2,2-Tetrachloroethane	ND	ug/kg	1.0				
Benzene	ND	ug/kg	1.0				
Toluene	ND	ug/kg	1.5				
Ethylbenzene	ND	ug/kg	1.0				
Chloromethane	ND	ug/kg	5.0				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0211671

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 07-08,11 (WG127649-9)							
Volatile Organics 8260 via Low 5035 continued				1 8260B		1119 15:12	BT
Bromomethane	ND	ug/kg	2.0				
Vinyl chloride	ND	ug/kg	2.0				
Chloroethane	ND	ug/kg	2.0				
1,1-Dichloroethene	ND	ug/kg	1.0				
trans-1,2-Dichloroethene	ND	ug/kg	1.5				
Trichloroethene	ND	ug/kg	1.0				
1,2-Dichlorobenzene	ND	ug/kg	5.0				
1,3-Dichlorobenzene	ND	ug/kg	5.0				
1,4-Dichlorobenzene	ND	ug/kg	5.0				
Methyl tert butyl ether	ND	ug/kg	2.0				
p/m-Xylene	ND	ug/kg	1.0				
o-Xylene	ND	ug/kg	1.0				
cis-1,2-Dichloroethene	ND	ug/kg	1.0				
Dibromomethane	ND	ug/kg	10.				
1,4-Dichlorobutane	ND	ug/kg	10.				
Iodomethane	ND	ug/kg	10.				
1,2,3-Trichloropropane	ND	ug/kg	10.				
Styrene	ND	ug/kg	1.0				
Dichlorodifluoromethane	ND	ug/kg	10.				
Acetone	ND	ug/kg	10.				
Carbon disulfide	ND	ug/kg	10.				
2-Butanone	ND	ug/kg	10.				
Vinyl acetate	ND	ug/kg	10.				
4-Methyl-2-pentanone	ND	ug/kg	10.				
2-Hexanone	ND	ug/kg	10.				
Ethyl methacrylate	ND	ug/kg	10.				
Acrolein	ND	ug/kg	25.				
Acrylonitrile	ND	ug/kg	10.				
Bromochloromethane	ND	ug/kg	5.0				
Tetrahydrofuran	ND	ug/kg	20.				
2,2-Dichloropropane	ND	ug/kg	5.0				
1,2-Dibromoethane	ND	ug/kg	5.0				
1,3-Dichloropropane	ND	ug/kg	5.0				
1,1,1,2-Tetrachloroethane	ND	ug/kg	1.0				
Bromobenzene	ND	ug/kg	5.0				
n-Butylbenzene	ND	ug/kg	1.0				
sec-Butylbenzene	ND	ug/kg	1.0				
tert-Butylbenzene	ND	ug/kg	5.0				
o-Chlorotoluene	ND	ug/kg	5.0				
p-Chlorotoluene	ND	ug/kg	5.0				
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.0				
Hexachlorobutadiene	ND	ug/kg	5.0				
Isopropylbenzene	ND	ug/kg	1.0				
p-Isopropyltoluene	ND	ug/kg	1.0				
Naphthalene	ND	ug/kg	5.0				
n-Propylbenzene	ND	ug/kg	1.0				
1,2,3-Trichlorobenzene	ND	ug/kg	5.0				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0211671

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 07-08,11 (WG127649-9)							
Volatile Organics 8260 via Low 5035 continued				1 8260B		1119 15:12	BT
1,2,4-Trichlorobenzene	ND	ug/kg	5.0				
1,3,5-Trimethylbenzene	ND	ug/kg	5.0				
1,2,4-Trimethylbenzene	ND	ug/kg	5.0				
trans-1,4-Dichloro-2-butene	ND	ug/kg	5.0				
Ethyl ether	ND	ug/kg	5.0				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	114.	%					
Toluene-d8	107.	%					
4-Bromofluorobenzene	100.	%					
Dibromofluoromethane	100.	%					
Blank Analysis for sample(s) 06,09-10 (WG128116-4)							
Volatile Organics 8260 via High 5035				1 8260B		1120 17:33	BT
Methylene chloride	ND	ug/kg	500				
1,1-Dichloroethane	ND	ug/kg	75.				
Chloroform	ND	ug/kg	75.				
Carbon tetrachloride	ND	ug/kg	50.				
1,2-Dichloropropane	ND	ug/kg	180				
Dibromochloromethane	ND	ug/kg	50.				
1,1,2-Trichloroethane	ND	ug/kg	75.				
Tetrachloroethene	ND	ug/kg	50.				
Chlorobenzene	ND	ug/kg	50.				
Trichlorofluoromethane	ND	ug/kg	250				
1,2-Dichloroethane	ND	ug/kg	50.				
1,1,1-Trichloroethane	ND	ug/kg	50.				
Bromodichloromethane	ND	ug/kg	50.				
trans-1,3-Dichloropropene	ND	ug/kg	50.				
cis-1,3-Dichloropropene	ND	ug/kg	50.				
1,1-Dichloropropene	ND	ug/kg	250				
Bromoform	ND	ug/kg	200				
1,1,2,2-Tetrachloroethane	ND	ug/kg	50.				
Benzene	ND	ug/kg	50.				
Toluene	ND	ug/kg	75.				
Ethylbenzene	ND	ug/kg	50.				
Chloromethane	ND	ug/kg	250				
Bromomethane	ND	ug/kg	100				
Vinyl chloride	ND	ug/kg	100				
Chloroethane	ND	ug/kg	100				
1,1-Dichloroethene	ND	ug/kg	50.				
trans-1,2-Dichloroethene	ND	ug/kg	75.				
Trichloroethene	ND	ug/kg	50.				
1,2-Dichlorobenzene	ND	ug/kg	250				
1,3-Dichlorobenzene	ND	ug/kg	250				
1,4-Dichlorobenzene	ND	ug/kg	250				
Methyl tert butyl ether	ND	ug/kg	100				
p/m-Xylene	ND	ug/kg	50.				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0211671

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 06,09-10 (WG128116-4)							
Volatile Organics 8260 via High 5035 continued				1 8260B		1120 17:33	BT
o-Xylene	ND	ug/kg	50.				
cis-1,2-Dichloroethene	ND	ug/kg	50.				
Dibromomethane	ND	ug/kg	500				
1,4-Dichlorobutane	ND	ug/kg	500				
Iodomethane	ND	ug/kg	500				
1,2,3-Trichloropropane	ND	ug/kg	500				
Styrene	ND	ug/kg	50.				
Dichlorodifluoromethane	ND	ug/kg	500				
Acetone	ND	ug/kg	500				
Carbon disulfide	ND	ug/kg	500				
2-Butanone	ND	ug/kg	500				
Vinyl acetate	ND	ug/kg	500				
4-Methyl-2-pentanone	ND	ug/kg	500				
2-Hexanone	ND	ug/kg	500				
Ethyl methacrylate	ND	ug/kg	500				
Acrolein	ND	ug/kg	1200				
Acrylonitrile	ND	ug/kg	500				
Bromochloromethane	ND	ug/kg	250				
Tetrahydrofuran	ND	ug/kg	1000				
2,2-Dichloropropane	ND	ug/kg	250				
1,2-Dibromoethane	ND	ug/kg	250				
1,3-Dichloropropane	ND	ug/kg	250				
1,1,1,2-Tetrachloroethane	ND	ug/kg	50.				
Bromobenzene	ND	ug/kg	250				
n-Butylbenzene	ND	ug/kg	50.				
sec-Butylbenzene	ND	ug/kg	50.				
tert-Butylbenzene	ND	ug/kg	250				
o-Chlorotoluene	ND	ug/kg	250				
p-Chlorotoluene	ND	ug/kg	250				
1,2-Dibromo-3-chloropropane	ND	ug/kg	250				
Hexachlorobutadiene	ND	ug/kg	250				
Isopropylbenzene	ND	ug/kg	50.				
p-Isopropyltoluene	ND	ug/kg	50.				
Naphthalene	ND	ug/kg	250				
n-Propylbenzene	ND	ug/kg	50.				
1,2,3-Trichlorobenzene	ND	ug/kg	250				
1,2,4-Trichlorobenzene	ND	ug/kg	250				
1,3,5-Trimethylbenzene	ND	ug/kg	250				
1,2,4-Trimethylbenzene	ND	ug/kg	250				
trans-1,4-Dichloro-2-butene	ND	ug/kg	250				
Ethyl ether	ND	ug/kg	250				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	117.	%	
Toluene-d8	104.	%	
4-Bromofluorobenzene	102.	%	
Dibromofluoromethane	96.0	%	

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0211671

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-02,04-05 (WG127660-1)							
Extractable Petroleum Hydrocarbons				46 98-1	1115 10:00	1118 10:48	PD
C9-C18 Aliphatics	ND	ug/l	100.				
C19-C36 Aliphatics	ND	ug/l	100.				
C11-C22 Aromatics, Unadjusted	ND	ug/l	100.				
C11-C22 Aromatics, Adjusted	ND	ug/l	100.				
Naphthalene	ND	ug/l	20.0				
2-Methylnaphthalene	ND	ug/l	20.0				
Acenaphthylene	ND	ug/l	20.0				
Acenaphthene	ND	ug/l	20.0				
Fluorene	ND	ug/l	20.0				
Phenanthrene	ND	ug/l	20.0				
Anthracene	ND	ug/l	20.0				
Fluoranthene	ND	ug/l	20.0				
Pyrene	ND	ug/l	20.0				
Benzo(a)anthracene	ND	ug/l	20.0				
Chrysene	ND	ug/l	20.0				
Benzo(b)fluoranthene	ND	ug/l	20.0				
Benzo(k)fluoranthene	ND	ug/l	20.0				
Benzo(a)pyrene	ND	ug/l	20.0				
Indeno(1,2,3-cd)Pyrene	ND	ug/l	20.0				
Dibenzo(a,h)anthracene	ND	ug/l	20.0				
Benzo(g,h,i)perylene	ND	ug/l	20.0				

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	65.0	%	40-140
o-Terphenyl	78.0	%	40-140
2-Fluorobiphenyl	77.0	%	40-140
2-Bromonaphthalene	70.0	%	40-140

Blank Analysis for sample(s) 06-10 (WG127534-6)							
Volatile Petroleum Hydrocarbons				47 98-1	1115 09:07	MM	
C5-C8 Aliphatics, Unadjusted	ND	mg/kg	2.00				
C9-C12 Aliphatics, Unadjusted	ND	mg/kg	2.00				
C9-C10 Aromatics	ND	mg/kg	2.00				

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	89.0	%	70-130
2,5-Dibromotoluene-FID	92.0	%	70-130

Blank Analysis for sample(s) 03-04,12 (WG127648-4)							
Volatile Petroleum Hydrocarbons				47 98-1	1115 09:07	MM	
C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0				
C9-C12 Aliphatics, Unadjusted	ND	ug/l	40.0				
C9-C10 Aromatics	ND	ug/l	40.0				
C5-C8 Aliphatics, Adjusted	ND	ug/l	40.0				
C9-C12 Aliphatics, Adjusted	ND	ug/l	40.0				
Benzene	ND	ug/l	2.00				
Toluene	ND	ug/l	2.00				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0211671

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 03-04,12 (WG127648-4)							
Volatile Petroleum Hydrocarbons continued				47 98-1		1115 09:07	MM
Ethylbenzene	ND	ug/l	2.00				
p/m-Xylene	ND	ug/l	2.00				
o-Xylene	ND	ug/l	2.00				
Methyl tert butyl ether	ND	ug/l	4.00				
Naphthalene	ND	ug/l	20.0				
Surrogate(s)	Recovery		QC Criteria				
2,5-Dibromotoluene-PID	89.0	%	70-130				
2,5-Dibromotoluene-FID	92.0	%	70-130				
Blank Analysis for sample(s) 05 (WG127756-3)							
Volatile Petroleum Hydrocarbons				47 98-1		1115 09:07	MM
C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0				
C9-C12 Aliphatics, Unadjusted	ND	ug/l	40.0				
C9-C10 Aromatics	ND	ug/l	40.0				
Surrogate(s)	Recovery		QC Criteria				
2,5-Dibromotoluene-PID	89.0	%	70-130				
2,5-Dibromotoluene-FID	92.0	%	70-130				
Blank Analysis for sample(s) 01-02 (WG127756-4)							
Volatile Petroleum Hydrocarbons				47 98-1		1118 10:10	MM
C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0				
C9-C12 Aliphatics, Unadjusted	ND	ug/l	40.0				
C9-C10 Aromatics	ND	ug/l	40.0				
Surrogate(s)	Recovery		QC Criteria				
2,5-Dibromotoluene-PID	90.0	%	70-130				
2,5-Dibromotoluene-FID	93.0	%	70-130				
Blank Analysis for sample(s) 06-10 (WG127645-1)							
Extractable Petroleum Hydrocarbons				46 98-1	1115 09:45	1118 18:18	PD
C9-C18 Aliphatics	ND	mg/kg	10.0				
C19-C36 Aliphatics	ND	mg/kg	10.0				
C11-C22 Aromatics, Unadjusted	ND	mg/kg	10.0				
C11-C22 Aromatics, Adjusted	ND	mg/kg	10.0				
Naphthalene	ND	mg/kg	0.500				
2-Methylnaphthalene	ND	mg/kg	0.500				
Acenaphthylene	ND	mg/kg	0.500				
Acenaphthene	ND	mg/kg	0.500				
Fluorene	ND	mg/kg	0.500				
Phenanthrene	ND	mg/kg	0.500				
Anthracene	ND	mg/kg	0.500				
Fluoranthene	ND	mg/kg	0.500				
Pyrene	ND	mg/kg	0.500				
Benzo(a)anthracene	ND	mg/kg	0.500				
Chrysene	ND	mg/kg	0.500				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0211671

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 06-10 (WG127645-1)							
Extractable Petroleum Hydrocarbons continued				46 98-1	1115 09:45	1118 18:18	PD
Benzo(b)fluoranthene	ND	mg/kg	0.500				
Benzo(k)fluoranthene	ND	mg/kg	0.500				
Benzo(a)pyrene	ND	mg/kg	0.500				
Indeno(1,2,3-cd)Pyrene	ND	mg/kg	0.500				
Dibenzo(a,h)anthracene	ND	mg/kg	0.500				
Benzo(g,h,i)perylene	ND	mg/kg	0.500				
Surrogate(s)	Recovery		QC Criteria				
Chloro-Octadecane	66.0	%	40-140				
o-Terphenyl	75.0	%	40-140				
2-Fluorobiphenyl	79.0	%	40-140				
2-Bromonaphthalene	74.0	%	40-140				

REFERENCES

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Update III, 1997.

30. Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

46. Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), Massachusetts Department of Environmental Protection, (MADEP-EPH-98-1), January 1998.

47. Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), Massachusetts Department of Environmental Protection, (MADEP-VPH-98-1), January 1998.

GLOSSARY OF TERMS AND SYMBOLS

REF Reference number in which test method may be found.
METHOD Method number by which analysis was performed.
ID Initials of the analyst.

Please note that all solid samples are reported on dry weight basis unless noted otherwise.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

CHAIN OF CUSTODY PAGE 1 OF ____

Eight Walkup Drive Westborough, MA 01581
TEL: 508-898-9220 FAX: 508-898-9193

Client: Rizzo Associates
Address: One Grant St
Framingham MA 01702
Phone: 508-903-2000
Fax: 508-903-2001
Email: jdeascentis@rizzo.com
☐ These samples have been previously analyzed by Alpha

Project Name: YK Management
Project Location: Somerville, MA
Project #: 2428-07
Project Manager: Janina Curtis
ALPHA Quote #:

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 11/4 Time:

☐ FAX
☒ ADEx
Criteria Checker: MCP
(Default based on Regulatory Criteria Indicated)
Other Formats: ____
☐ EMAIL (standard pdf report)
☐ Additional Deliverables: ____
Report to: (if different than Project Manager) ____

☒ Same as Client Info PO #: 2428-07

State /Fed	Program	Criteria
MA	DEP	S-1
"	"	GW-2

Other Project Specific Requirements/Comments:

Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VPH (8260 Standard)	EPH (Standard Fuels)	8260 (VOCs)	8260/5035 (Low)	8260/5035 (Chem)	Total Solids	
GP-1-GW	11/1/02	12:40	GW	JLD	2	2	2	—			
GP-2-GW		13:15						—			
GP-3-GW		12:00						—			
GP-4-GW		13:40						—			
GP-5-GW		14:30						—			
GP-1-B-8'	11/3/02	9:30	SOIL	JLD	2	2	-	2	1	1	
GP-2-8-12'		11:30			1	1	-	2	1	1	
GP-3-4-8'		12:55			1	1	-	2	1	1	
GP-4-8-12'		14:00			1	1	-	2	1	1	
GP-5-4-8'		14:50			1	1	-	2	1	1	
					Container Type			V	V	P	
					Preservative			F	F	A	

SAMPLE HANDLING
Filtration
☐ Done
☒ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Sample Specific Comments

Relinquished By:	Date/Time	Received By:	Date/Time
	11/4/02 1700		11/4/02 1700

Form No: 02-02 STD

CHAIN OF CUSTODY PAGE 2 OF ____

Eight Walkup Drive Westborough, MA 01581
TEL: 508-898-9220 FAX: 508-898-9193

Client: Rizzo Associates
Address: One Grant St
Framingham, MA 01701
Phone: 508-903 2000
Fax: 508-903-2001
Email: jdeascentis@rizzo.com
☐ These samples have been previously analyzed by Alpha

Project Name: YLC Management
Project Location: Somerville, MA
Project #: 2425-07
Project Manager: Janina Curtis
ALPHA Quote #:

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 11/21 Time:

☐ FAX
☒ ADEx
Criteria Checker: MCP
(Default based on Regulatory Criteria Indicated)
Other Formats:
☐ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager)

☒ Same as Client info PO #: 2428-07

State /Fed	Program	Criteria
MA	DEP	S-1
" "	" "	GW-2

Other Project Specific Requirements/Comments:

| Sample ID | Collection Date | Collection Time | Sample Matrix | Sampler's Initials | VPH standard | EPH deluxe | 8260 (VOC) | 8260/5035 (low) | 8260 (5035 (high) | | |

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: Rizzo Associates

Address: 1 Grant Street
Framingham, MA 01701-9005

Attn: Ms. Janina Curtis

Project Number: 2428-06

Site: SOMERVILLE AVE

Laboratory Job Number: L0211837

Date Received: 19-NOV-2002

Date Reported: 26-NOV-2002

Delivery Method: Alpha

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0211837-01	RIZ-2-GW	SOMERVILLE, MA

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: Scott McLean

Scott McLean - Technical Director
This document electronically signed

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0211837

Alpha Report L0211837:

Volatile Organics

The matrix spike/matrix spike duplicate Associated with Alpha Sample L0211837-01-shows one or more recoveries to be below the acceptance criteria required for the method. The relative percent recovery associated with Alpha Sample L0211837-01-shows one or more recoveries to be above the acceptance criteria required for the method. The laboratory control sample recoveries are within acceptable limits.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0211837-01
RIZ-2-GW
Sample Matrix: WATER

Date Collected: 19-NOV-2002 08:00
Date Received : 19-NOV-2002
Date Reported : 26-NOV-2002

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260				1 8260B		1122 18:00	BT
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
1,1-Dichloropropene	ND	ug/l	2.5				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Benzene	ND	ug/l	0.50				
Toluene	ND	ug/l	0.75				
Ethylbenzene	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
p/m-Xylene	ND	ug/l	0.50				
o-Xylene	ND	ug/l	0.50				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,4-Dichlorobutane	ND	ug/l	5.0				
Iodomethane	ND	ug/l	5.0				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211837-01
RIZ-2-GW

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260 continued				1 8260B		1122 18:00	BT
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
Vinyl acetate	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				
Ethyl methacrylate	ND	ug/l	5.0				
Acrolein	ND	ug/l	12.				
Acrylonitrile	ND	ug/l	5.0				
Bromochloromethane	ND	ug/l	2.5				
Tetrahydrofuran	ND	ug/l	10.				
2,2-Dichloropropane	ND	ug/l	2.5				
1,2-Dibromoethane	ND	ug/l	2.5				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
Bromobenzene	ND	ug/l	2.5				
n-Butylbenzene	ND	ug/l	0.50				
sec-Butylbenzene	ND	ug/l	0.50				
tert-Butylbenzene	ND	ug/l	2.5				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	2.5				
Isopropylbenzene	ND	ug/l	0.50				
p-Isopropyltoluene	ND	ug/l	0.50				
Naphthalene	ND	ug/l	2.5				
n-Propylbenzene	ND	ug/l	0.50				
1,2,3-Trichlorobenzene	ND	ug/l	2.5				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
1,3,5-Trimethylbenzene	ND	ug/l	2.5				
1,2,4-Trimethylbenzene	ND	ug/l	2.5				
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5				
Ethyl ether	ND	ug/l	2.5				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	112.	%	
Toluene-d8	104.	%	
4-Bromofluorobenzene	105.	%	
Dibromofluoromethane	110.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211837-01
RIZ-2-GW

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1121 19:49	MS

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
VPH Standard analysis reports only range data with no adjustments.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C10 Aromatics	ND	ug/l	40.0

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	86.0	%	70-130
2,5-Dibromotoluene-FID	88.0	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0211837-01
RIZ-2-GW

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	1120 12:30	1121 17:30	PD

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	ug/l	106.
C19-C36 Aliphatics	ND	ug/l	106.
C11-C22 Aromatics, Unadjusted	ND	ug/l	106.
C11-C22 Aromatics, Adjusted	ND	ug/l	106.
Naphthalene	ND	ug/l	21.3
2-Methylnaphthalene	ND	ug/l	21.3
Acenaphthylene	ND	ug/l	21.3
Acenaphthene	ND	ug/l	21.3
Fluorene	ND	ug/l	21.3
Phenanthrene	ND	ug/l	21.3
Anthracene	ND	ug/l	21.3
Fluoranthene	ND	ug/l	21.3
Pyrene	ND	ug/l	21.3
Benzo(a)anthracene	ND	ug/l	21.3
Chrysene	ND	ug/l	21.3
Benzo(b)fluoranthene	ND	ug/l	21.3
Benzo(k)fluoranthene	ND	ug/l	21.3
Benzo(a)pyrene	ND	ug/l	21.3
Indeno(1,2,3-cd)Pyrene	ND	ug/l	21.3
Dibenzo(a,h)anthracene	ND	ug/l	21.3
Benzo(g,h,i)perylene	ND	ug/l	21.3

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	67.0	%	40-140
o-Terphenyl	92.0	%	40-140
2-Fluorobiphenyl	89.0	%	40-140
2-Bromonaphthalene	97.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0211837

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Volatile Petroleum Hydrocarbons for sample(s) 01 (L0211767-01, WG128171)					
C5-C8 Aliphatics	ND	ND	ug/l	NC	50
C9-C12 Aliphatics	ND	ND	ug/l	NC	50
C9-C10 Aromatics	ND	ND	ug/l	NC	50
C5-C8 Aliphatics, Adjusted	ND	ND	ug/l	NC	50
C9-C12 Aliphatics, Adjusted	ND	ND	ug/l	NC	50
Benzene	ND	ND	ug/l	NC	50
Toluene	ND	ND	ug/l	NC	50
Ethylbenzene	ND	ND	ug/l	NC	50
p/m-Xylene	ND	ND	ug/l	NC	50
o-Xylene	ND	ND	ug/l	NC	50
Methyl tert butyl ether	ND	ND	ug/l	NC	50
Naphthalene	ND	ND	ug/l	NC	50
Surrogate(s)	Recovery				QC Criteria
2,5-Dibromotoluene-PID	86.0	86.0	%	0	70-130
2,5-Dibromotoluene-FID	87.0	87.0	%	0	70-130
Extractable Petroleum Hydrocarbons for sample(s) 01 (L0211804-01, WG128032)					
C9-C18 Aliphatics	ND	ND	ug/l	NC	50
C19-C36 Aliphatics	ND	ND	ug/l	NC	50
C11-C22 Aromatics	ND	ND	ug/l	NC	50
Surrogate(s)	Recovery				QC Criteria
Chloro-Octadecane	77.0	60.0	%	25	40-140
o-Terphenyl	82.0	87.0	%	6	40-140
2-Fluorobiphenyl	78.0	78.0	%	0	40-140
2-Bromonaphthalene	83.0	82.0	%	1	40-140

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0211837

Parameter	% Recovery	QC Criteria
Volatile Organics by GC/MS 8260 LCS for sample(s) 01 (WG128018)		
Chlorobenzene	104	
Benzene	104	
Toluene	106	
1,1-Dichloroethene	100	
Trichloroethene	99	
Surrogate(s)		
1,2-Dichloroethane-d4	101	
Toluene-d8	104	
4-Bromofluorobenzene	103	
Dibromofluoromethane	103	
Volatile Petroleum Hydrocarbons LCS for sample(s) 01 (WG128171)		
Benzene	92	70-130
Toluene	93	70-130
Ethylbenzene	91	70-130
p/m-Xylene	88	70-130
o-Xylene	88	70-130
Methyl tert butyl ether	93	70-130
Naphthalene	94	70-130
Surrogate(s)		
2,5-Dibromotoluene-PID	90	70-130
2,5-Dibromotoluene-FID	91	70-130
Extractable Petroleum Hydrocarbons LCS for sample(s) 01 (WG128032)		
Naphthalene	64	40-140
Acenaphthene	72	40-140
Anthracene	91	40-140
Pyrene	96	40-140
Chrysene	100	40-140
Nonane (C9)	61	40-140
Tetradecane (C14)	80	40-140
Nonadecane (C19)	92	40-140
Eicosane (C20)	94	40-140
Octacosane (C28)	98	40-140
Surrogate(s)		
Chloro-Octadecane	86	40-140
o-Terphenyl	93	40-140
2-Fluorobiphenyl	82	40-140
2-Bromonaphthalene	80	40-140

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

Laboratory Job Number: L0211837

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
Volatile Organics by GC/MS 8260 for sample(s) 01 (L0211727-08, WG128018)					
Chlorobenzene	104	100	4		
Benzene	104	100	4		
Toluene	107	102	5		
1,1-Dichloroethene	100	94	6		
Trichloroethene	62	45	31		
Surrogate(s)					
1,2-Dichloroethane-d4	117	110	6		
Toluene-d8	123	117	5		
4-Bromofluorobenzene	116	115	1		
Dibromofluoromethane	123	115	7		

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0211837

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG128018-10)							
Volatile Organics by GC/MS 8260				1 8260B		1122 16:06	BT
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
1,1-Dichloropropene	ND	ug/l	2.5				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Benzene	ND	ug/l	0.50				
Toluene	ND	ug/l	0.75				
Ethylbenzene	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
p/m-Xylene	ND	ug/l	0.50				
o-Xylene	ND	ug/l	0.50				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,4-Dichlorobutane	ND	ug/l	5.0				
Iodomethane	ND	ug/l	5.0				
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
Vinyl acetate	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0211837

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG128018-10)							
Volatile Organics by GC/MS 8260 continued				1 8260B		1122 16:06	BT
Ethyl methacrylate	ND	ug/l	5.0				
Acrolein	ND	ug/l	12.				
Acrylonitrile	ND	ug/l	5.0				
Bromochloromethane	ND	ug/l	2.5				
Tetrahydrofuran	ND	ug/l	10.				
2,2-Dichloropropane	ND	ug/l	2.5				
1,2-Dibromoethane	ND	ug/l	2.5				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
Bromobenzene	ND	ug/l	2.5				
n-Butylbenzene	ND	ug/l	0.50				
sec-Butylbenzene	ND	ug/l	0.50				
tert-Butylbenzene	ND	ug/l	2.5				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	2.5				
Isopropylbenzene	ND	ug/l	0.50				
p-Isopropyltoluene	ND	ug/l	0.50				
Naphthalene	ND	ug/l	2.5				
n-Propylbenzene	ND	ug/l	0.50				
1,2,3-Trichlorobenzene	ND	ug/l	2.5				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
1,3,5-Trimethylbenzene	ND	ug/l	2.5				
1,2,4-Trimethylbenzene	ND	ug/l	2.5				
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5				
Ethyl ether	ND	ug/l	2.5				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	105.	%					
Toluene-d8	97.0	%					
4-Bromofluorobenzene	99.0	%					
Dibromofluoromethane	102.	%					
Blank Analysis for sample(s) 01 (WG128171-4)							
Volatile Petroleum Hydrocarbons				47 98-1		1121 09:09	MM
C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0				
C9-C12 Aliphatics, Unadjusted	ND	ug/l	40.0				
C9-C10 Aromatics	ND	ug/l	40.0				
C5-C8 Aliphatics, Adjusted	ND	ug/l	40.0				
C9-C12 Aliphatics, Adjusted	ND	ug/l	40.0				
Benzene	ND	ug/l	2.00				
Toluene	ND	ug/l	2.00				
Ethylbenzene	ND	ug/l	2.00				
p/m-Xylene	ND	ug/l	2.00				
o-Xylene	ND	ug/l	2.00				
Methyl tert butyl ether	ND	ug/l	4.00				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0211837

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG128171-4)							
Volatile Petroleum Hydrocarbons continued				47 98-1		1121 09:09	MM
Naphthalene	ND	ug/l	20.0				
Surrogate(s)	Recovery		QC Criteria				
2,5-Dibromotoluene-PID	86.0	%	70-130				
2,5-Dibromotoluene-FID	86.0	%	70-130				
Blank Analysis for sample(s) 01 (WG128032-1)							
Extractable Petroleum Hydrocarbons				46 98-1	1120 12:30	1121 12:56	PD
C9-C18 Aliphatics	ND	ug/l	100.				
C19-C36 Aliphatics	ND	ug/l	100.				
C11-C22 Aromatics, Unadjusted	ND	ug/l	100.				
C11-C22 Aromatics, Adjusted	ND	ug/l	100.				
Naphthalene	ND	ug/l	20.0				
2-Methylnaphthalene	ND	ug/l	20.0				
Acenaphthylene	ND	ug/l	20.0				
Acenaphthene	ND	ug/l	20.0				
Fluorene	ND	ug/l	20.0				
Phenanthrene	ND	ug/l	20.0				
Anthracene	ND	ug/l	20.0				
Fluoranthene	ND	ug/l	20.0				
Pyrene	ND	ug/l	20.0				
Benzo(a)anthracene	ND	ug/l	20.0				
Chrysene	ND	ug/l	20.0				
Benzo(b)fluoranthene	ND	ug/l	20.0				
Benzo(k)fluoranthene	ND	ug/l	20.0				
Benzo(a)pyrene	ND	ug/l	20.0				
Indeno(1,2,3-cd)Pyrene	ND	ug/l	20.0				
Dibenzo(a,h)anthracene	ND	ug/l	20.0				
Benzo(g,h,i)perylene	ND	ug/l	20.0				
Surrogate(s)	Recovery		QC Criteria				
Chloro-Octadecane	83.0	%	40-140				
o-Terphenyl	67.0	%	40-140				
2-Fluorobiphenyl	64.0	%	40-140				
2-Bromonaphthalene	61.0	%	40-140				

REFERENCES

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Update III, 1997.

46. Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), Massachusetts Department of Environmental Protection, (MADEP-EPH-98-1), January 1998.

47. Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), Massachusetts Department of Environmental Protection, (MADEP-VPH-98-1), January 1998.

GLOSSARY OF TERMS AND SYMBOLS

REF Reference number in which test method may be found.
METHOD Method number by which analysis was performed.
ID Initials of the analyst.

Please note that all solid samples are reported on dry weight basis unless noted otherwise.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

CHAIN OF CUSTODY PAGE 1 OF 1

Eight Walkup Drive Westborough, MA 01581
TEL: 508-898-9220 FAX: 508-898-9193

Client: Rizzo Associates
Address: One Corporate Dr
Wilmington, MA
Phone: 978-203-2900
Fax: 508-703-2001
Email: jcurtis@rizzo.com

☐ These samples have been previously analyzed by Alpha

Project Name: Somerville Ave
Project Location: Somerville, MA
Project #: 2428-01
Project Manager: Janine Curtis
ALPHA Quote #:

☐ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: 11/26/02 Time:

Other Project Specific Requirements/Comments:
CW-2

☐ FAX
☒ ADEx
Criteria Checker: DEP
(Default based on Regulatory Criteria Indicated)
Other Formats:
☐ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager)

☒ Same as Client Info PO #: 2428-01

State /Fed	Program	Criteria
MA	DEP	CW-2

SAMPLE HANDLING
Filtration
☐ Done
☒ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	EPH dulux	VPH standard	VOCs via 8260	Sample Specific Comments	
R12-2-GW	11/19/02	8:00	GW	JD	2	2	2		6

Container Type	A	V	V
Preservative	S	S	S

Relinquished By:	Date/Time	Received By:	Date/Time
	11/19/02 1725		11/19/02 17:25

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: Sanborn, Head & Associates, Inc.
Laboratory Job Number: L0309656

Address: 239 Littleton Road
Suite 1C
Westford, MA 01886

Date Received: 25-SEP-2003

Attn: Mr. Duncan Wood

Date Reported: 03-OCT-2003

Project Number: 2315.00

Delivery Method: Alpha

Site: 515 SOMERVILLE AVE

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0309656-01	SH-1, 3-4'	SOMERVILLE, MA
L0309656-02	SH-2, 3-4'	SOMERVILLE, MA
L0309656-03	SH-2, 7-8'	SOMERVILLE, MA
L0309656-04	SH-3, 3-4'	SOMERVILLE, MA
L0309656-05	SH-3, 8-9'	SOMERVILLE, MA
L0309656-06	SH-4, 3-4'	SOMERVILLE, MA
L0309656-07	SH-4, 9-10'	SOMERVILLE, MA
L0309656-08	SH-5, 3-4'	SOMERVILLE, MA
L0309656-09	SH-6, 3-4'	SOMERVILLE, MA
L0309656-10	SH-7, 3-4'	SOMERVILLE, MA
L0309656-11	TRIP BLANK-VPH DELUX	SOMERVILLE, MA
L0309656-12	TRIP BLANK-CVOC LOW LEVEL	SOMERVILLE, MA
L0309656-13	SH-1	SOMERVILLE, MA
L0309656-14	SH-2	SOMERVILLE, MA
L0309656-15	SH-3	SOMERVILLE, MA
L0309656-16	SH-4	SOMERVILLE, MA
L0309656-17	SH-5	SOMERVILLE, MA
L0309656-18	SH-6	SOMERVILLE, MA
L0309656-19	SH-7	SOMERVILLE, MA
L0309656-20	GP-1	SOMERVILLE, MA
L0309656-21	GP-4	SOMERVILLE, MA
L0309656-22	ET-1	SOMERVILLE, MA
L0309656-23	ET-2	SOMERVILLE, MA
L0309656-24	TRIP BLANK-VPH DELUX	SOMERVILLE, MA

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: Scott McLean
This document electronically signed

ALPHA ANALYTICAL LABORATORIES

Laboratory Job Number: L0309656
Date Reported: 03-OCT-2003

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0309656-25	TRIP BLANK-CVOC 8021	SOMERVILLE, MA

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0309656

Volatile Organics

The analysis of Volatile Organics by EPA Method 8260B/5035 Low Level could not be performed on L0309656-03, -07 and -09 due to the high concentrations of target and non-target compounds present in the samples.

L0309656-03, -07 and -14 through -17 have elevated limits of detection due to the dilutions required by the elevated concentrations of non-target compounds in the samples.

VPH

L0309656-14 through -16 has elevated limits of detection due to the dilutions required by the elevated concentrations of target compounds in the samples.

EPH

L0309656-09 has elevated limits of detection due to the 5x dilution required by the elevated concentrations of target compounds in the sample.

One of the LCS % recoveries for Nonane associated with L0309656-13, -14, -16 and -20 through -23 is 39%.

L0308656-17, -18, -19 were re-extracted within the method required holding time and re-analyzed due to quality control failure of the original batch. The surrogate % recovery for Chloro-Octadecane on each sample is below the acceptance criteria for the method. The original analysis of the samples confirms the low surrogate. The results of the re-analysis are reported, along with the acceptable quality control.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309656-01
SH-1, 3-4'
Sample Matrix: SOIL

Date Collected: 24-SEP-2003 12:45
Date Received : 25-SEP-2003
Date Reported : 03-OCT-2003

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber,1-Plastic,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	90.	%	0.10	30 2540G		0926 12:51	ST
Volatile Organics 8260 via Low 5035				1 8260B		0930 00:11	ST
Methylene chloride	ND	ug/kg	9.7				
1,1-Dichloroethane	ND	ug/kg	1.5				
Chloroform	ND	ug/kg	1.5				
Carbon tetrachloride	ND	ug/kg	0.97				
1,2-Dichloropropane	ND	ug/kg	3.4				
Dibromochloromethane	ND	ug/kg	0.97				
1,1,2-Trichloroethane	ND	ug/kg	1.5				
Tetrachloroethene	ND	ug/kg	0.97				
Chlorobenzene	ND	ug/kg	0.97				
Trichlorofluoromethane	ND	ug/kg	4.9				
1,2-Dichloroethane	ND	ug/kg	0.97				
1,1,1-Trichloroethane	ND	ug/kg	0.97				
Bromodichloromethane	ND	ug/kg	0.97				
trans-1,3-Dichloropropene	ND	ug/kg	0.97				
cis-1,3-Dichloropropene	ND	ug/kg	0.97				
Bromoform	ND	ug/kg	3.9				
1,1,2,2-Tetrachloroethane	ND	ug/kg	0.97				
Chloromethane	ND	ug/kg	4.9				
Bromomethane	ND	ug/kg	1.9				
Vinyl chloride	ND	ug/kg	1.9				
Chloroethane	ND	ug/kg	1.9				
1,1-Dichloroethene	ND	ug/kg	0.97				
trans-1,2-Dichloroethene	ND	ug/kg	1.5				
Trichloroethene	ND	ug/kg	0.97				
1,2-Dichlorobenzene	ND	ug/kg	4.9				
1,3-Dichlorobenzene	ND	ug/kg	4.9				
1,4-Dichlorobenzene	ND	ug/kg	4.9				
cis-1,2-Dichloroethene	ND	ug/kg	0.97				
Dichlorodifluoromethane	ND	ug/kg	9.7				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	112.	%	
Toluene-d8	117.	%	
4-Bromofluorobenzene	114.	%	
Dibromofluoromethane	110.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-01
SH-1, 3-4'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1001 15:33 MM	

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Were samples received in methanol? Covering the Soil
Methanol ratio: 1:1 +/- 25%
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	mg/kg	2.73
C9-C12 Aliphatics, Unadjusted	ND	mg/kg	2.73
C9-C10 Aromatics	ND	mg/kg	2.73
C5-C8 Aliphatics, Adjusted	ND	mg/kg	2.73
C9-C12 Aliphatics, Adjusted	ND	mg/kg	2.73
Benzene	ND	mg/kg	0.137
Toluene	ND	mg/kg	0.137
Ethylbenzene	ND	mg/kg	0.137
p/m-Xylene	ND	mg/kg	0.137
o-Xylene	ND	mg/kg	0.137
Methyl tert butyl ether	ND	mg/kg	0.273
Naphthalene	ND	mg/kg	1.37

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	123.	%	70-130
2,5-Dibromotoluene-FID	120.	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-01
SH-1, 3-4'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	0926 10:45	0930 09:13	BW

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	mg/kg	11.1
C19-C36 Aliphatics	ND	mg/kg	11.1
C11-C22 Aromatics, Unadjusted	ND	mg/kg	11.1
C11-C22 Aromatics, Adjusted	ND	mg/kg	11.1
Naphthalene	ND	mg/kg	0.556
2-Methylnaphthalene	ND	mg/kg	0.556
Acenaphthylene	ND	mg/kg	0.556
Acenaphthene	ND	mg/kg	0.556
Fluorene	ND	mg/kg	0.556
Phenanthrene	ND	mg/kg	0.556
Anthracene	ND	mg/kg	0.556
Fluoranthene	ND	mg/kg	0.556
Pyrene	ND	mg/kg	0.556
Benzo(a)anthracene	ND	mg/kg	0.556
Chrysene	ND	mg/kg	0.556
Benzo(b)fluoranthene	ND	mg/kg	0.556
Benzo(k)fluoranthene	ND	mg/kg	0.556
Benzo(a)pyrene	ND	mg/kg	0.556
Indeno(1,2,3-cd)Pyrene	ND	mg/kg	0.556
Dibenzo(a,h)anthracene	ND	mg/kg	0.556
Benzo(g,h,i)perylene	ND	mg/kg	0.556

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	60.0	%	40-140
o-Terphenyl	64.0	%	40-140
2-Fluorobiphenyl	67.0	%	40-140
2-Bromonaphthalene	69.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number:	L0309656-02	**Date Collected:**	24-SEP-2003 09:50
	SH-2, 3-4'	**Date Received :**	25-SEP-2003
Sample Matrix:	SOIL	**Date Reported :**	03-OCT-2003
Condition of Sample:	Satisfactory	**Field Prep:**	None

Number & Type of Containers: 1-Amber,1-Plastic,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID

******* THIS SAMPLE IS ON HOLD *******

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309656-03 SH-2, 7-8'
Sample Matrix: SOIL

Date Collected: 24-SEP-2003 10:15
Date Received : 25-SEP-2003
Date Reported : 03-OCT-2003

Condition of Sample: Satisfactory
Field Prep: None

Number & Type of Containers: 1-Amber,1-Plastic,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	96.	%	0.10	30 2540G		0926 12:51	ST
Volatile Organics 8260 via High 5035				1 8260B		0930 20:41	BT
Methylene chloride	ND	ug/kg	5400				
1,1-Dichloroethane	ND	ug/kg	810				
Chloroform	ND	ug/kg	810				
Carbon tetrachloride	ND	ug/kg	540				
1,2-Dichloropropane	ND	ug/kg	1900				
Dibromochloromethane	ND	ug/kg	540				
1,1,2-Trichloroethane	ND	ug/kg	810				
Tetrachloroethene	ND	ug/kg	540				
Chlorobenzene	ND	ug/kg	540				
Trichlorofluoromethane	ND	ug/kg	2700				
1,2-Dichloroethane	ND	ug/kg	540				
1,1,1-Trichloroethane	ND	ug/kg	540				
Bromodichloromethane	ND	ug/kg	540				
trans-1,3-Dichloropropene	ND	ug/kg	540				
cis-1,3-Dichloropropene	ND	ug/kg	540				
Bromoform	ND	ug/kg	2200				
1,1,2,2-Tetrachloroethane	ND	ug/kg	540				
Chloromethane	ND	ug/kg	2700				
Bromomethane	ND	ug/kg	1100				
Vinyl chloride	ND	ug/kg	1100				
Chloroethane	ND	ug/kg	1100				
1,1-Dichloroethene	ND	ug/kg	540				
trans-1,2-Dichloroethene	ND	ug/kg	810				
Trichloroethene	ND	ug/kg	540				
1,2-Dichlorobenzene	ND	ug/kg	2700				
1,3-Dichlorobenzene	ND	ug/kg	2700				
1,4-Dichlorobenzene	ND	ug/kg	2700				
cis-1,2-Dichloroethene	ND	ug/kg	540				
Dichlorodifluoromethane	ND	ug/kg	5400				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	98.0	%	
Toluene-d8	109.	%	
4-Bromofluorobenzene	117.	%	
Dibromofluoromethane	94.0	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-03
SH-2, 7-8'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1001 16:24 MM	

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Were samples received in methanol? Covering the Soil
Methanol ratio: 1:1 +/- 25%
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	9.49	mg/kg	2.42
C9-C12 Aliphatics, Unadjusted	435.	mg/kg	2.42
C9-C10 Aromatics	214.	mg/kg	2.42
C5-C8 Aliphatics, Adjusted	9.49	mg/kg	2.42
C9-C12 Aliphatics, Adjusted	219.	mg/kg	2.42
Benzene	ND	mg/kg	0.121
Toluene	ND	mg/kg	0.121
Ethylbenzene	0.644	mg/kg	0.121
p/m-Xylene	ND	mg/kg	0.121
o-Xylene	1.14	mg/kg	0.121
Methyl tert butyl ether	ND	mg/kg	0.242
Naphthalene	ND	mg/kg	1.21

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	98.0	%	70-130
2,5-Dibromotoluene-FID	94.0	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-03
SH-2, 7-8'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	0926 10:45	0930 10:02	BM

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	543.	mg/kg	10.4
C19-C36 Aliphatics	153.	mg/kg	10.4
C11-C22 Aromatics, Unadjusted	59.6	mg/kg	10.4
C11-C22 Aromatics, Adjusted	59.6	mg/kg	10.4
Naphthalene	ND	mg/kg	0.521
2-Methylnaphthalene	ND	mg/kg	0.521
Acenaphthylene	ND	mg/kg	0.521
Acenaphthene	ND	mg/kg	0.521
Fluorene	ND	mg/kg	0.521
Phenanthrene	ND	mg/kg	0.521
Anthracene	ND	mg/kg	0.521
Fluoranthene	ND	mg/kg	0.521
Pyrene	ND	mg/kg	0.521
Benzo(a)anthracene	ND	mg/kg	0.521
Chrysene	ND	mg/kg	0.521
Benzo(b)fluoranthene	ND	mg/kg	0.521
Benzo(k)fluoranthene	ND	mg/kg	0.521
Benzo(a)pyrene	ND	mg/kg	0.521
Indeno(1,2,3-cd)Pyrene	ND	mg/kg	0.521
Dibenzo(a,h)anthracene	ND	mg/kg	0.521
Benzo(g,h,i)perylene	ND	mg/kg	0.521

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	55.0	%	40-140
o-Terphenyl	75.0	%	40-140
2-Fluorobiphenyl	66.0	%	40-140
2-Bromonaphthalene	69.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number:	L0309656-04	**Date Collected:**	24-SEP-2003 11:15
	SH-3, 3-4'	**Date Received :**	25-SEP-2003
Sample Matrix:	SOIL	**Date Reported :**	03-OCT-2003
Condition of Sample:	Satisfactory	**Field Prep:**	None

Number & Type of Containers: 1-Amber,1-Plastic,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID

******* THIS SAMPLE IS ON HOLD *******

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309656-05
SH-3, 8-9'
Sample Matrix: SOIL

Date Collected: 24-SEP-2003 11:50
Date Received : 25-SEP-2003
Date Reported : 03-OCT-2003

Condition of Sample: Satisfactory
Field Prep: None

Number & Type of Containers: 1-Amber,1-Plastic,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	86.	%	0.10	30 25400		0926 12:51	ST
Volatile Organics 8260 via Low	5035			1 8260B		0930 00:55	ST
Methylene chloride	ND	ug/kg	9.1				
1,1-Dichloroethane	ND	ug/kg	1.4				
Chloroform	ND	ug/kg	1.4				
Carbon tetrachloride	ND	ug/kg	0.91				
1,2-Dichloropropane	ND	ug/kg	3.2				
Dibromochloromethane	ND	ug/kg	0.91				
1,1,2-Trichloroethane	ND	ug/kg	1.4				
Tetrachloroethene	ND	ug/kg	0.91				
Chlorobenzene	ND	ug/kg	0.91				
Trichlorofluoromethane	ND	ug/kg	4.5				
1,2-Dichloroethane	ND	ug/kg	0.91				
1,1,1-Trichloroethane	ND	ug/kg	0.91				
Bromodichloromethane	ND	ug/kg	0.91				
trans-1,3-Dichloropropene	ND	ug/kg	0.91				
cis-1,3-Dichloropropene	ND	ug/kg	0.91				
Bromoform	ND	ug/kg	3.6				
1,1,2,2-Tetrachloroethane	ND	ug/kg	0.91				
Chloromethane	ND	ug/kg	4.5				
Bromomethane	ND	ug/kg	1.8				
Vinyl chloride	ND	ug/kg	1.8				
Chloroethane	ND	ug/kg	1.8				
1,1-Dichloroethene	ND	ug/kg	0.91				
trans-1,2-Dichloroethene	ND	ug/kg	1.4				
Trichloroethene	ND	ug/kg	0.91				
1,2-Dichlorobenzene	ND	ug/kg	4.5				
1,3-Dichlorobenzene	ND	ug/kg	4.5				
1,4-Dichlorobenzene	ND	ug/kg	4.5				
cis-1,2-Dichloroethene	ND	ug/kg	0.91				
Dichlorodifluoromethane	ND	ug/kg	9.1				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	112.	%	
Toluene-d8	114.	%	
4-Bromofluorobenzene	114.	%	
Dibromofluoromethane	110.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-05
SH-3, 8-9'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1001 17:15 MM	

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Were samples received in methanol? Covering the Soil
Methanol ratio: Below 1:1 +/- 25%
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	mg/kg	3.32
C9-C12 Aliphatics, Unadjusted	ND	mg/kg	3.32
C9-C10 Aromatics	ND	mg/kg	3.32
C5-C8 Aliphatics, Adjusted	ND	mg/kg	3.32
C9-C12 Aliphatics, Adjusted	ND	mg/kg	3.32
Benzene	ND	mg/kg	0.166
Toluene	ND	mg/kg	0.166
Ethylbenzene	ND	mg/kg	0.166
p/m-Xylene	ND	mg/kg	0.166
o-Xylene	ND	mg/kg	0.166
Methyl tert butyl ether	ND	mg/kg	0.332
Naphthalene	ND	mg/kg	1.66

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	106.	%	70-130
2,5-Dibromotoluene-FID	105.	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-05
SH-3, 8-9'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	0926 10:45	0930 10:51	BW

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	mg/kg	11.6
C19-C36 Aliphatics	ND	mg/kg	11.6
C11-C22 Aromatics, Unadjusted	ND	mg/kg	11.6
C11-C22 Aromatics, Adjusted	ND	mg/kg	11.6
Naphthalene	ND	mg/kg	0.581
2-Methylnaphthalene	ND	mg/kg	0.581
Acenaphthylene	ND	mg/kg	0.581
Acenaphthene	ND	mg/kg	0.581
Fluorene	ND	mg/kg	0.581
Phenanthrene	ND	mg/kg	0.581
Anthracene	ND	mg/kg	0.581
Fluoranthene	ND	mg/kg	0.581
Pyrene	ND	mg/kg	0.581
Benzo(a)anthracene	ND	mg/kg	0.581
Chrysene	ND	mg/kg	0.581
Benzo(b)fluoranthene	ND	mg/kg	0.581
Benzo(k)fluoranthene	ND	mg/kg	0.581
Benzo(a)pyrene	ND	mg/kg	0.581
Indeno(1,2,3-cd)Pyrene	ND	mg/kg	0.581
Dibenzo(a,h)anthracene	ND	mg/kg	0.581
Benzo(g,h,i)perylene	ND	mg/kg	0.581

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	73.0	%	40-140
o-Terphenyl	78.0	%	40-140
2-Fluorobiphenyl	71.0	%	40-140
2-Bromonaphthalene	73.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number:	L0309656-06	**Date Collected:**	24-SEP-2003 17:00
	SH-4, 3-4'	**Date Received :**	25-SEP-2003
Sample Matrix:	SOIL	**Date Reported :**	03-OCT-2003
Condition of Sample:	Satisfactory	**Field Prep:**	None

Number & Type of Containers: 1-Amber,1-Plastic,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID

******* THIS SAMPLE IS ON HOLD *******

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309656-07
SH-4, 9-10'
Sample Matrix: SOIL

Date Collected: 24-SEP-2003 17:45
Date Received : 25-SEP-2003
Date Reported : 03-OCT-2003

Condition of Sample: Satisfactory
Field Prep: None

Number & Type of Containers: 1-Amber,1-Plastic,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	96.	%	0.10	30 2540G		0926 12:51	ST
Volatile Organics 8260 via High 5035				1 8260B		0930 21:25	BT
Methylene chloride	ND	ug/kg	1900				
1,1-Dichloroethane	ND	ug/kg	290				
Chloroform	ND	ug/kg	290				
Carbon tetrachloride	ND	ug/kg	190				
1,2-Dichloropropane	ND	ug/kg	680				
Dibromochloromethane	ND	ug/kg	190				
1,1,2-Trichloroethane	ND	ug/kg	290				
Tetrachloroethene	ND	ug/kg	190				
Chlorobenzene	ND	ug/kg	190				
Trichlorofluoromethane	ND	ug/kg	960				
1,2-Dichloroethane	ND	ug/kg	190				
1,1,1-Trichloroethane	ND	ug/kg	190				
Bromodichloromethane	ND	ug/kg	190				
trans-1,3-Dichloropropene	ND	ug/kg	190				
cis-1,3-Dichloropropene	ND	ug/kg	190				
Bromoform	ND	ug/kg	770				
1,1,2,2-Tetrachloroethane	ND	ug/kg	190				
Chloromethane	ND	ug/kg	960				
Bromomethane	ND	ug/kg	380				
Vinyl chloride	ND	ug/kg	380				
Chloroethane	ND	ug/kg	380				
1,1-Dichloroethene	ND	ug/kg	190				
trans-1,2-Dichloroethene	ND	ug/kg	290				
Trichloroethene	ND	ug/kg	190				
1,2-Dichlorobenzene	ND	ug/kg	960				
1,3-Dichlorobenzene	ND	ug/kg	960				
1,4-Dichlorobenzene	ND	ug/kg	960				
cis-1,2-Dichloroethene	ND	ug/kg	190				
Dichlorodifluoromethane	ND	ug/kg	1900				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	95.0	%	
Toluene-d8	110.	%	
4-Bromofluorobenzene	105.	%	
Dibromofluoromethane	90.0	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-07
SH-4, 9-10'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1001 18:06	MM

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Were samples received in methanol? Covering the Soil
Methanol ratio: 1:1 +/- 25%
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	mg/kg	1.99
C9-C12 Aliphatics, Unadjusted	120.	mg/kg	1.99
C9-C10 Aromatics	62.6	mg/kg	1.99
C5-C8 Aliphatics, Adjusted	ND	mg/kg	1.99
C9-C12 Aliphatics, Adjusted	57.4	mg/kg	1.99
Benzene	ND	mg/kg	0.100
Toluene	ND	mg/kg	0.100
Ethylbenzene	ND	mg/kg	0.100
p/m-Xylene	ND	mg/kg	0.100
o-Xylene	ND	mg/kg	0.100
Methyl tert butyl ether	ND	mg/kg	0.199
Naphthalene	ND	mg/kg	0.995

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	112.	%	70-130
2,5-Dibromotoluene-FID	102.	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-07
SH-4, 9-10'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	0926 10:45	0930 11:40	BW

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	51.9	mg/kg	10.4
C19-C36 Aliphatics	38.7	mg/kg	10.4
C11-C22 Aromatics, Unadjusted	27.9	mg/kg	10.4
C11-C22 Aromatics, Adjusted	27.9	mg/kg	10.4
Naphthalene	ND	mg/kg	0.521
2-Methylnaphthalene	ND	mg/kg	0.521
Acenaphthylene	ND	mg/kg	0.521
Acenaphthene	ND	mg/kg	0.521
Fluorene	ND	mg/kg	0.521
Phenanthrene	ND	mg/kg	0.521
Anthracene	ND	mg/kg	0.521
Fluoranthene	ND	mg/kg	0.521
Pyrene	ND	mg/kg	0.521
Benzo(a)anthracene	ND	mg/kg	0.521
Chrysene	ND	mg/kg	0.521
Benzo(b)fluoranthene	ND	mg/kg	0.521
Benzo(k)fluoranthene	ND	mg/kg	0.521
Benzo(a)pyrene	ND	mg/kg	0.521
Indeno(1,2,3-cd)Pyrene	ND	mg/kg	0.521
Dibenzo(a,h)anthracene	ND	mg/kg	0.521
Benzo(g,h,i)perylene	ND	mg/kg	0.521

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	48.0	%	40-140
o-Terphenyl	69.0	%	40-140
2-Fluorobiphenyl	62.0	%	40-140
2-Bromonaphthalene	66.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309656-08
SH-5, 3-4'
Sample Matrix: SOIL

Date Collected: 24-SEP-2003 16:20
Date Received : 25-SEP-2003
Date Reported : 03-OCT-2003

Condition of Sample: Satisfactory
Field Prep: None

Number & Type of Containers: 1-Amber,1-Plastic,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	93.	%	0.10	30 2540G		0926 12:51	ST
Volatile Organics 8260 via Low	5035			1 8260B		0930 02:22	ST
Methylene chloride	ND	ug/kg	8.3				
1,1-Dichloroethane	ND	ug/kg	1.2				
Chloroform	ND	ug/kg	1.2				
Carbon tetrachloride	ND	ug/kg	0.83				
1,2-Dichloropropane	ND	ug/kg	2.9				
Dibromochloromethane	ND	ug/kg	0.83				
1,1,2-Trichloroethane	ND	ug/kg	1.2				
Tetrachloroethene	ND	ug/kg	0.83				
Chlorobenzene	ND	ug/kg	0.83				
Trichlorofluoromethane	ND	ug/kg	4.1				
1,2-Dichloroethane	ND	ug/kg	0.83				
1,1,1-Trichloroethane	ND	ug/kg	0.83				
Bromodichloromethane	ND	ug/kg	0.83				
trans-1,3-Dichloropropene	ND	ug/kg	0.83				
cis-1,3-Dichloropropene	ND	ug/kg	0.83				
Bromoform	ND	ug/kg	3.3				
1,1,2,2-Tetrachloroethane	ND	ug/kg	0.83				
Chloromethane	ND	ug/kg	4.1				
Bromomethane	ND	ug/kg	1.6				
Vinyl chloride	ND	ug/kg	1.6				
Chloroethane	ND	ug/kg	1.6				
1,1-Dichloroethene	ND	ug/kg	0.83				
trans-1,2-Dichloroethene	ND	ug/kg	1.2				
Trichloroethene	ND	ug/kg	0.83				
1,2-Dichlorobenzene	ND	ug/kg	4.1				
1,3-Dichlorobenzene	ND	ug/kg	4.1				
1,4-Dichlorobenzene	ND	ug/kg	4.1				
cis-1,2-Dichloroethene	ND	ug/kg	0.83				
Dichlorodifluoromethane	ND	ug/kg	8.3				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	113.	%	
Toluene-d8	121.	%	
4-Bromofluorobenzene	128.	%	
Dibromofluoromethane	112.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-08
SH-5, 3-4'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1001 10:57	

Quality Control Information

Condition of sample received:	Satisfactory
Sample temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	Below 1:1 +/- 25%

Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	mg/kg	3.07
C9-C12 Aliphatics, Unadjusted	44.5	mg/kg	3.07
C9-C10 Aromatics	17.1	mg/kg	3.07
C5-C8 Aliphatics, Adjusted	ND	mg/kg	3.07
C9-C12 Aliphatics, Adjusted	27.4	mg/kg	3.07
Benzene	ND	mg/kg	0.154
Toluene	ND	mg/kg	0.154
Ethylbenzene	ND	mg/kg	0.154
p/m-Xylene	ND	mg/kg	0.154
o-Xylene	ND	mg/kg	0.154
Methyl tert butyl ether	ND	mg/kg	0.307
Naphthalene	ND	mg/kg	1.54

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	117.	%	70-130
2,5-Dibromotoluene-FID	114.	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-08
SH-5, 3-4'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	0926 10:45	0930 12:29	BW

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	mg/kg	10.8
C19-C36 Aliphatics	ND	mg/kg	10.8
C11-C22 Aromatics, Unadjusted	ND	mg/kg	10.8
C11-C22 Aromatics, Adjusted	ND	mg/kg	10.8
Naphthalene	ND	mg/kg	0.538
2-Methylnaphthalene	ND	mg/kg	0.538
Acenaphthylene	ND	mg/kg	0.538
Acenaphthene	ND	mg/kg	0.538
Fluorene	ND	mg/kg	0.538
Phenanthrene	ND	mg/kg	0.538
Anthracene	ND	mg/kg	0.538
Fluoranthene	ND	mg/kg	0.538
Pyrene	ND	mg/kg	0.538
Benzo(a)anthracene	ND	mg/kg	0.538
Chrysene	ND	mg/kg	0.538
Benzo(b)fluoranthene	ND	mg/kg	0.538
Benzo(k)fluoranthene	ND	mg/kg	0.538
Benzo(a)pyrene	ND	mg/kg	0.538
Indeno(1,2,3-cd)Pyrene	ND	mg/kg	0.538
Dibenzo(a,h)anthracene	ND	mg/kg	0.538
Benzo(g,h,i)perylene	ND	mg/kg	0.538

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	54.0	%	40-140
o-Terphenyl	67.0	%	40-140
2-Fluorobiphenyl	65.0	%	40-140
2-Bromonaphthalene	68.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309656-09
SH-6, 3-4'
Sample Matrix: SOIL

Date Collected: 24-SEP-2003 15:15
Date Received : 25-SEP-2003
Date Reported : 03-OCT-2003

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber,1-Plastic,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	94.	%	0.10	30 2540G		0926 12:51	ST
Volatile Organics 8260 via High 5035				1 8260B		0930 22:09	BT
Methylene chloride	ND	ug/kg	650				
1,1-Dichloroethane	ND	ug/kg	98.				
Chloroform	ND	ug/kg	98.				
Carbon tetrachloride	ND	ug/kg	65.				
1,2-Dichloropropane	ND	ug/kg	230				
Dibromochloromethane	ND	ug/kg	65.				
1,1,2-Trichloroethane	ND	ug/kg	98.				
Tetrachloroethene	ND	ug/kg	65.				
Chlorobenzene	ND	ug/kg	65.				
Trichlorofluoromethane	ND	ug/kg	330				
1,2-Dichloroethane	ND	ug/kg	65.				
1,1,1-Trichloroethane	ND	ug/kg	65.				
Bromodichloromethane	ND	ug/kg	65.				
trans-1,3-Dichloropropene	ND	ug/kg	65.				
cis-1,3-Dichloropropene	ND	ug/kg	65.				
Bromoform	ND	ug/kg	260				
1,1,2,2-Tetrachloroethane	ND	ug/kg	65.				
Chloromethane	ND	ug/kg	330				
Bromomethane	ND	ug/kg	130				
Vinyl chloride	ND	ug/kg	130				
Chloroethane	ND	ug/kg	130				
1,1-Dichloroethene	ND	ug/kg	65.				
trans-1,2-Dichloroethene	ND	ug/kg	98.				
Trichloroethene	ND	ug/kg	65.				
1,2-Dichlorobenzene	ND	ug/kg	330				
1,3-Dichlorobenzene	ND	ug/kg	330				
1,4-Dichlorobenzene	ND	ug/kg	330				
cis-1,2-Dichloroethene	ND	ug/kg	65.				
Dichlorodifluoromethane	ND	ug/kg	650				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	92.0	%	
Toluene-d8	113.	%	
4-Bromofluorobenzene	102.	%	
Dibromofluoromethane	87.0	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-09
SH-6, 3-4'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1002 11:45	MM

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Were samples received in methanol? Covering the Soil
Methanol ratio: Below 1:1 +/- 25%
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	mg/kg	3.19
C9-C12 Aliphatics, Unadjusted	ND	mg/kg	3.19
C9-C10 Aromatics	ND	mg/kg	3.19
C5-C8 Aliphatics, Adjusted	ND	mg/kg	3.19
C9-C12 Aliphatics, Adjusted	ND	mg/kg	3.19
Benzene	ND	mg/kg	0.160
Toluene	ND	mg/kg	0.160
Ethylbenzene	ND	mg/kg	0.160
p/m-Xylene	ND	mg/kg	0.160
o-Xylene	ND	mg/kg	0.160
Methyl tert butyl ether	ND	mg/kg	0.319
Naphthalene	ND	mg/kg	1.60

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	94.0	%	70-130
2,5-Dibromotoluene-FID	118.	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-09
SH-6, 3-4'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	0926 10:45	1001 09:16	BW

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	mg/kg	53.2
C19-C36 Aliphatics	74.5	mg/kg	53.2
C11-C22 Aromatics, Unadjusted	965.	mg/kg	53.2
C11-C22 Aromatics, Adjusted	523.	mg/kg	53.2
Naphthalene	ND	mg/kg	2.66
2-Methylnaphthalene	ND	mg/kg	2.66
Acenaphthylene	ND	mg/kg	2.66
Acenaphthene	7.19	mg/kg	2.66
Fluorene	9.54	mg/kg	2.66
Phenanthrene	102.	mg/kg	2.66
Anthracene	27.2	mg/kg	2.66
Fluoranthene	83.8	mg/kg	2.66
Pyrene	68.7	mg/kg	2.66
Benzo(a)anthracene	28.8	mg/kg	2.66
Chrysene	27.8	mg/kg	2.66
Benzo(b)fluoranthene	22.6	mg/kg	2.66
Benzo(k)fluoranthene	18.1	mg/kg	2.66
Benzo(a)pyrene	20.9	mg/kg	2.66
Indeno(1,2,3-cd)Pyrene	11.7	mg/kg	2.66
Dibenzo(a,h)anthracene	3.72	mg/kg	2.66
Benzo(g,h,i)perylene	9.66	mg/kg	2.66

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	59.0	%	40-140
o-Terphenyl	104.	%	40-140
2-Fluorobiphenyl	70.0	%	40-140
2-Bromonaphthalene	79.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309656-10
SH-7, 3-4'
Sample Matrix: SOIL

Date Collected: 24-SEP-2003 14:00
Date Received : 25-SEP-2003
Date Reported : 03-OCT-2003

Condition of Sample: Satisfactory
Field Prep: None

Number & Type of Containers: 1-Amber,1-Plastic,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Solids, Total	89.	%	0.10	30 2540G		0926 12:51	ST
Volatile Organics 8260 via Low	5035			1 8260B		1001 18:46	ST
Methylene chloride	ND	ug/kg	8.8				
1,1-Dichloroethane	ND	ug/kg	1.3				
Chloroform	ND	ug/kg	1.3				
Carbon tetrachloride	ND	ug/kg	0.88				
1,2-Dichloropropane	ND	ug/kg	3.1				
Dibromochloromethane	ND	ug/kg	0.88				
1,1,2-Trichloroethane	ND	ug/kg	1.3				
Tetrachloroethene	2.0	ug/kg	0.88				
Chlorobenzene	ND	ug/kg	0.88				
Trichlorofluoromethane	ND	ug/kg	4.4				
1,2-Dichloroethane	ND	ug/kg	0.88				
1,1,1-Trichloroethane	ND	ug/kg	0.88				
Bromodichloromethane	ND	ug/kg	0.88				
trans-1,3-Dichloropropene	ND	ug/kg	0.88				
cis-1,3-Dichloropropene	ND	ug/kg	0.88				
Bromoform	ND	ug/kg	3.5				
1,1,2,2-Tetrachloroethane	ND	ug/kg	0.88				
Chloromethane	ND	ug/kg	4.4				
Bromomethane	ND	ug/kg	1.8				
Vinyl chloride	ND	ug/kg	1.8				
Chloroethane	ND	ug/kg	1.8				
1,1-Dichloroethene	ND	ug/kg	0.88				
trans-1,2-Dichloroethene	ND	ug/kg	1.3				
Trichloroethene	ND	ug/kg	0.88				
1,2-Dichlorobenzene	ND	ug/kg	4.4				
1,3-Dichlorobenzene	ND	ug/kg	4.4				
1,4-Dichlorobenzene	ND	ug/kg	4.4				
cis-1,2-Dichloroethene	ND	ug/kg	0.88				
Dichlorodifluoromethane	ND	ug/kg	8.8				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	104.	%	
Toluene-d8	119.	%	
4-Bromofluorobenzene	128.	%	
Dibromofluoromethane	105.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-10
SH-7, 3-4'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1001 20:36	MH

Quality Control Information

Condition of sample received:	Satisfactory
Sample temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	Below 1:1 +/- 25%

Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	mg/kg	3.37
C9-C12 Aliphatics, Unadjusted	ND	mg/kg	3.37
C9-C10 Aromatics	ND	mg/kg	3.37
C5-C8 Aliphatics, Adjusted	ND	mg/kg	3.37
C9-C12 Aliphatics, Adjusted	ND	mg/kg	3.37
Benzene	ND	mg/kg	0.168
Toluene	ND	mg/kg	0.168
Ethylbenzene	ND	mg/kg	0.168
p/m-Xylene	ND	mg/kg	0.168
o-Xylene	ND	mg/kg	0.168
Methyl tert butyl ether	ND	mg/kg	0.337
Naphthalene	ND	mg/kg	1.68

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	117.	%	70-130
2,5-Dibromotoluene-FID	120.	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-10
SH-7, 3-4'

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	0926 10:45	0930 14:07	BW

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	mg/kg	11.2
C19-C36 Aliphatics	ND	mg/kg	11.2
C11-C22 Aromatics, Unadjusted	12.5	mg/kg	11.2
C11-C22 Aromatics, Adjusted	12.5	mg/kg	11.2
Naphthalene	ND	mg/kg	0.562
2-Methylnaphthalene	ND	mg/kg	0.562
Acenaphthylene	ND	mg/kg	0.562
Acenaphthene	ND	mg/kg	0.562
Fluorene	ND	mg/kg	0.562
Phenanthrene	ND	mg/kg	0.562
Anthracene	ND	mg/kg	0.562
Fluoranthene	ND	mg/kg	0.562
Pyrene	ND	mg/kg	0.562
Benzo(a)anthracene	ND	mg/kg	0.562
Chrysene	ND	mg/kg	0.562
Benzo(b)fluoranthene	ND	mg/kg	0.562
Benzo(k)fluoranthene	ND	mg/kg	0.562
Benzo(a)pyrene	ND	mg/kg	0.562
Indeno(1,2,3-cd)Pyrene	ND	mg/kg	0.562
Dibenzo(a,h)anthracene	ND	mg/kg	0.562
Benzo(g,h,i)perylene	ND	mg/kg	0.562

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	61.0	%	40-140
o-Terphenyl	69.0	%	40-140
2-Fluorobiphenyl	58.0	%	40-140
2-Bromonaphthalene	62.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309656-11 — **Date Collected:** 22-JUL-2003 09:05
TRIP BLANK-VPH DELUX — **Date Received :** 25-SEP-2003
Sample Matrix: SOIL — **Date Reported :** 03-OCT-2003

Condition of Sample: Satisfactory — **Field Prep:** None

Number & Type of Containers: 1-Vial

Comments:
Results are reported on an 'AS RECEIVED' basis.

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1001 21:29 MM	

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Were samples received in methanol? Covering the Soil
Methanol ratio: 1:1 +/- 25%
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	mg/kg	2.00
C9-C12 Aliphatics, Unadjusted	ND	mg/kg	2.00
C9-C10 Aromatics	ND	mg/kg	2.00
C5-C8 Aliphatics, Adjusted	ND	mg/kg	2.00
C9-C12 Aliphatics, Adjusted	ND	mg/kg	2.00
Benzene	ND	mg/kg	0.100
Toluene	ND	mg/kg	0.100
Ethylbenzene	ND	mg/kg	0.100
p/m-Xylene	ND	mg/kg	0.100
o-Xylene	ND	mg/kg	0.100
Methyl tert butyl ether	ND	mg/kg	0.200
Naphthalene	ND	mg/kg	1.00

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	104.	%	70-130
2,5-Dibromotoluene-FID	106.	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 RI:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309656-12 TRIP BLANK-CVOC LOW LEVEL
Sample Matrix: SOIL

Date Collected: 22-SEP-2003 09:00
Date Received : 25-SEP-2003
Date Reported : 03-OCT-2003

Condition of Sample: Satisfactory
Field Prep: None

Number & Type of Containers: 2-Vial

Comments:
Results are reported on an 'AS RECEIVED' basis.

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics 8260 via Low	5035			1 8260B		0930	01:38 BT
Methylene chloride	ND	ug/kg	10.				
1,1-Dichloroethane	ND	ug/kg	1.5				
Chloroform	ND	ug/kg	1.5				
Carbon tetrachloride	ND	ug/kg	1.0				
1,2-Dichloropropane	ND	ug/kg	3.5				
Dibromochloromethane	ND	ug/kg	1.0				
1,1,2-Trichloroethane	ND	ug/kg	1.5				
Tetrachloroethene	ND	ug/kg	1.0				
Chlorobenzene	ND	ug/kg	1.0				
Trichlorofluoromethane	ND	ug/kg	5.0				
1,2-Dichloroethane	ND	ug/kg	1.0				
1,1,1-Trichloroethane	ND	ug/kg	1.0				
Bromodichloromethane	ND	ug/kg	1.0				
trans-1,3-Dichloropropene	ND	ug/kg	1.0				
cis-1,3-Dichloropropene	ND	ug/kg	1.0				
Bromoform	ND	ug/kg	4.0				
1,1,2,2-Tetrachloroethane	ND	ug/kg	1.0				
Chloromethane	ND	ug/kg	5.0				
Bromomethane	ND	ug/kg	2.0				
Vinyl chloride	ND	ug/kg	2.0				
Chloroethane	ND	ug/kg	2.0				
1,1-Dichloroethene	ND	ug/kg	1.0				
trans-1,2-Dichloroethene	ND	ug/kg	1.5				
Trichloroethene	ND	ug/kg	1.0				
1,2-Dichlorobenzene	ND	ug/kg	5.0				
1,3-Dichlorobenzene	ND	ug/kg	5.0				
1,4-Dichlorobenzene	ND	ug/kg	5.0				
cis-1,2-Dichloroethene	ND	ug/kg	1.0				
Dichlorodifluoromethane	ND	ug/kg	10.				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	113.	%	
Toluene-d8	116.	%	
4-Bromofluorobenzene	116.	%	
Dibromofluoromethane	110.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309656-13
SH-1
Sample Matrix: WATER

Date Collected: 25-SEP-2003 08:40
Date Received : 25-SEP-2003
Date Reported : 03-OCT-2003

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260				1 8260B		0930 13:32	RY
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	107.	%	
Toluene-d8	101.	%	
4-Bromofluorobenzene	110.	%	
Dibromofluoromethane	104.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-13
SR-1

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 90-1		1001 17:01 MM	

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C10 Aromatics	ND	ug/l	40.0
C5-C8 Aliphatics, Adjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Adjusted	ND	ug/l	40.0
Benzene	ND	ug/l	2.00
Toluene	ND	ug/l	2.00
Ethylbenzene	ND	ug/l	2.00
p/m-Xylene	ND	ug/l	2.00
o-Xylene	ND	ug/l	2.00
Methyl tert butyl ether	ND	ug/l	4.00
Naphthalene	ND	ug/l	20.0

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	110.	%	70-130
2,5-Dibromotoluene-FID	112.	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-13
SH-1

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	1001 16:40	1003 01:24	BJ

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? NO
1. One or more of the EPH LCS recoveries were less than 40%.
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	ug/l	125.
C19-C36 Aliphatics	ND	ug/l	125.
C11-C22 Aromatics, Unadjusted	ND	ug/l	125.
C11-C22 Aromatics, Adjusted	ND	ug/l	125.
Naphthalene	ND	ug/l	25.0
2-Methylnaphthalene	ND	ug/l	25.0
Acenaphthylene	ND	ug/l	25.0
Acenaphthene	ND	ug/l	25.0
Fluorene	ND	ug/l	25.0
Phenanthrene	ND	ug/l	25.0
Anthracene	ND	ug/l	25.0
Fluoranthene	ND	ug/l	25.0
Pyrene	ND	ug/l	25.0
Benzo(a)anthracene	ND	ug/l	25.0
Chrysene	ND	ug/l	25.0
Benzo(b)fluoranthene	ND	ug/l	25.0
Benzo(k)fluoranthene	ND	ug/l	25.0
Benzo(a)pyrene	ND	ug/l	25.0
Indeno(1,2,3-cd)Pyrene	ND	ug/l	25.0
Dibenzo(a,h)anthracene	ND	ug/l	25.0
Benzo(g,h,i)perylene	ND	ug/l	25.0

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	58.0	%	40-140
o-Terphenyl	75.0	%	40-140
2-Fluorobiphenyl	69.0	%	40-140
2-Bromonaphthalene	69.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309656-14
SH-2
Sample Matrix: WATER

Date Collected: 25-SEP-2003 10:00
Date Received : 25-SEP-2003
Date Reported : 03-OCT-2003

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260				1 8260B		0930 14:07	RY
Methylene chloride	ND	ug/l	25.				
1,1-Dichloroethane	ND	ug/l	3.8				
Chloroform	ND	ug/l	3.8				
Carbon tetrachloride	ND	ug/l	2.5				
1,2-Dichloropropane	ND	ug/l	8.8				
Dibromochloromethane	ND	ug/l	2.5				
1,1,2-Trichloroethane	ND	ug/l	3.8				
Tetrachloroethene	ND	ug/l	2.5				
Chlorobenzene	ND	ug/l	2.5				
Trichlorofluoromethane	ND	ug/l	12.				
1,2-Dichloroethane	ND	ug/l	2.5				
1,1,1-Trichloroethane	ND	ug/l	2.5				
Bromodichloromethane	ND	ug/l	2.5				
trans-1,3-Dichloropropene	ND	ug/l	2.5				
cis-1,3-Dichloropropene	ND	ug/l	2.5				
Bromoform	ND	ug/l	10.				
1,1,2,2-Tetrachloroethane	ND	ug/l	2.5				
Chloromethane	ND	ug/l	12.				
Bromomethane	ND	ug/l	5.0				
Vinyl chloride	ND	ug/l	5.0				
Chloroethane	ND	ug/l	5.0				
1,1-Dichloroethene	ND	ug/l	2.5				
trans-1,2-Dichloroethene	ND	ug/l	3.8				
Trichloroethene	ND	ug/l	2.5				
1,2-Dichlorobenzene	ND	ug/l	12.				
1,3-Dichlorobenzene	ND	ug/l	12.				
1,4-Dichlorobenzene	ND	ug/l	12.				
cis-1,2-Dichloroethene	ND	ug/l	2.5				
Dichlorodifluoromethane	ND	ug/l	25.				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	108.	%	
Toluene-d8	97.0	%	
4-Bromofluorobenzene	124.	%	
Dibromofluoromethane	105.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-14
SH-2

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1001 17:51	

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	ug/l	80.0
C9-C12 Aliphatics, Unadjusted	2270	ug/l	80.0
C9-C10 Aromatics	1380	ug/l	80.0
C5-C8 Aliphatics, Adjusted	ND	ug/l	80.0
C9-C12 Aliphatics, Adjusted	882.	ug/l	80.0
Benzene	ND	ug/l	4.00
Toluene	ND	ug/l	4.00
Ethylbenzene	ND	ug/l	4.00
p/m-Xylene	ND	ug/l	4.00
o-Xylene	ND	ug/l	4.00
Methyl tert butyl ether	ND	ug/l	8.00
Naphthalene	ND	ug/l	40.0

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	129.	%	70-130
2,5-Dibromotoluene-FID	129.	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-14
SH-2

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	1001 16:40	1003 02:10	BJ

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? NO
1. One or more of the EPH LCS recoveries were less than 40%.
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	2390	ug/l	105.
C19-C36 Aliphatics	270.	ug/l	105.
C11-C22 Aromatics, Unadjusted	323.	ug/l	105.
C11-C22 Aromatics, Adjusted	323.	ug/l	105.
Naphthalene	ND	ug/l	21.0
2-Methylnaphthalene	ND	ug/l	21.0
Acenaphthylene	ND	ug/l	21.0
Acenaphthene	ND	ug/l	21.0
Fluorene	ND	ug/l	21.0
Phenanthrene	ND	ug/l	21.0
Anthracene	ND	ug/l	21.0
Fluoranthene	ND	ug/l	21.0
Pyrene	ND	ug/l	21.0
Benzo(a)anthracene	ND	ug/l	21.0
Chrysene	ND	ug/l	21.0
Benzo(b)fluoranthene	ND	ug/l	21.0
Benzo(k)fluoranthene	ND	ug/l	21.0
Benzo(a)pyrene	ND	ug/l	21.0
Indeno(1,2,3-cd)Pyrene	ND	ug/l	21.0
Dibenzo(a,h)anthracene	ND	ug/l	21.0
Benzo(g,h,i)perylene	ND	ug/l	21.0

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	42.0	%	40-140
o-Terphenyl	81.0	%	40-140
2-Fluorobiphenyl	75.0	%	40-140
2-Bromonaphthalene	76.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309656-15 SH-3 | **Date Collected:** 25-SEP-2003 10:00
Sample Matrix: WATER | **Date Received :** 25-SEP-2003
Date Reported : 03-OCT-2003

Condition of Sample: Satisfactory | **Field Prep:** None

Number & Type of Containers: 2-Amber,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260				1 8260B		0930 14:43	RY
Methylene chloride	ND	ug/l	50.				
1,1-Dichloroethane	ND	ug/l	7.5				
Chloroform	ND	ug/l	7.5				
Carbon tetrachloride	ND	ug/l	5.0				
1,2-Dichloropropane	ND	ug/l	18.				
Dibromochloromethane	ND	ug/l	5.0				
1,1,2-Trichloroethane	ND	ug/l	7.5				
Tetrachloroethene	ND	ug/l	5.0				
Chlorobenzene	ND	ug/l	5.0				
Trichlorofluoromethane	ND	ug/l	25.				
1,2-Dichloroethane	ND	ug/l	5.0				
1,1,1-Trichloroethane	ND	ug/l	5.0				
Bromodichloromethane	ND	ug/l	5.0				
trans-1,3-Dichloropropene	ND	ug/l	5.0				
cis-1,3-Dichloropropene	ND	ug/l	5.0				
Bromoform	ND	ug/l	20.				
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0				
Chloromethane	ND	ug/l	25.				
Bromomethane	ND	ug/l	10.				
Vinyl chloride	ND	ug/l	10.				
Chloroethane	ND	ug/l	10.				
1,1-Dichloroethene	ND	ug/l	5.0				
trans-1,2-Dichloroethene	ND	ug/l	7.5				
Trichloroethene	ND	ug/l	5.0				
1,2-Dichlorobenzene	ND	ug/l	25.				
1,3-Dichlorobenzene	ND	ug/l	25.				
1,4-Dichlorobenzene	ND	ug/l	25.				
cis-1,2-Dichloroethene	ND	ug/l	5.0				
Dichlorodifluoromethane	ND	ug/l	50.				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	106.	%	
Toluene-d8	101.	%	
4-Bromofluorobenzene	105.	%	
Dibromofluoromethane	101.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-15
SH-3

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				67 98-1		1001 18:41	MH

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	ug/l	100.
C9-C12 Aliphatics, Unadjusted	1880	ug/l	100.
C9-C10 Aromatics	1730	ug/l	100.
C5-C8 Aliphatics, Adjusted	ND	ug/l	100.
C9-C12 Aliphatics, Adjusted	135.	ug/l	100.
Benzene	ND	ug/l	5.00
Toluene	ND	ug/l	5.00
Ethylbenzene	ND	ug/l	5.00
p/m-Xylene	18.0	ug/l	5.00
o-Xylene	ND	ug/l	5.00
Methyl tert butyl ether	ND	ug/l	10.0
Naphthalene	ND	ug/l	50.0

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	123.	%	70-130
2,5-Dibromotoluene-FID	118.	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-15
SH-3

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	1001 14:15	1002 20:09	BJ

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	ug/l	119.
C19-C36 Aliphatics	ND	ug/l	119.
C11-C22 Aromatics, Unadjusted	ND	ug/l	119.
C11-C22 Aromatics, Adjusted	ND	ug/l	119.
Naphthalene	ND	ug/l	23.8
2-Methylnaphthalene	ND	ug/l	23.8
Acenaphthylene	ND	ug/l	23.8
Acenaphthene	ND	ug/l	23.8
Fluorene	ND	ug/l	23.8
Phenanthrene	ND	ug/l	23.8
Anthracene	ND	ug/l	23.8
Fluoranthene	ND	ug/l	23.8
Pyrene	ND	ug/l	23.8
Benzo(a)anthracene	ND	ug/l	23.8
Chrysene	ND	ug/l	23.8
Benzo(b)fluoranthene	ND	ug/l	23.8
Benzo(k)fluoranthene	ND	ug/l	23.8
Benzo(a)pyrene	ND	ug/l	23.8
Indeno(1,2,3-cd)Pyrene	ND	ug/l	23.8
Dibenzo(a,h)anthracene	ND	ug/l	23.8
Benzo(g,h,i)perylene	ND	ug/l	23.8

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	40.0	%	40-140
o-Terphenyl	74.0	%	40-140
2-Fluorobiphenyl	77.0	%	40-140
2-Bromonaphthalene	82.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309656-16
SH-4
Sample Matrix: WATER

Date Collected: 25-SEP-2003 14:00
Date Received : 25-SEP-2003
Date Reported : 03-OCT-2003

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260				1 8260B		0930 23:50	RY
Methylene chloride	ND	ug/l	120				
1,1-Dichloroethane	ND	ug/l	19.				
Chloroform	ND	ug/l	19.				
Carbon tetrachloride	ND	ug/l	12.				
1,2-Dichloropropane	ND	ug/l	44.				
Dibromochloromethane	ND	ug/l	12.				
1,1,2-Trichloroethane	ND	ug/l	19.				
Tetrachloroethene	ND	ug/l	12.				
Chlorobenzene	ND	ug/l	12.				
Trichlorofluoromethane	ND	ug/l	62.				
1,2-Dichloroethane	ND	ug/l	12.				
1,1,1-Trichloroethane	ND	ug/l	12.				
Bromodichloromethane	ND	ug/l	12.				
trans-1,3-Dichloropropene	ND	ug/l	12.				
cis-1,3-Dichloropropene	ND	ug/l	12.				
Bromoform	ND	ug/l	50.				
1,1,2,2-Tetrachloroethane	ND	ug/l	12.				
Chloromethane	ND	ug/l	62.				
Bromomethane	ND	ug/l	25.				
Vinyl chloride	ND	ug/l	25.				
Chloroethane	ND	ug/l	25.				
1,1-Dichloroethene	ND	ug/l	12.				
trans-1,2-Dichloroethene	ND	ug/l	19.				
Trichloroethene	ND	ug/l	12.				
1,2-Dichlorobenzene	ND	ug/l	62.				
1,3-Dichlorobenzene	ND	ug/l	62.				
1,4-Dichlorobenzene	ND	ug/l	62.				
cis-1,2-Dichloroethene	ND	ug/l	12.				
Dichlorodifluoromethane	ND	ug/l	120				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	111.	%	
Toluene-d8	101.	%	
4-Bromofluorobenzene	104.	%	
Dibromofluoromethane	104.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-16
SH-4

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1001 19:31	MH

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	ug/l	400.
C9-C12 Aliphatics, Unadjusted	3470	ug/l	400.
C9-C10 Aromatics	3320	ug/l	400.
C5-C8 Aliphatics, Adjusted	ND	ug/l	400.
C9-C12 Aliphatics, Adjusted	ND	ug/l	400.
Benzene	ND	ug/l	20.0
Toluene	ND	ug/l	20.0
Ethylbenzene	ND	ug/l	20.0
p/m-Xylene	ND	ug/l	20.0
o-Xylene	ND	ug/l	20.0
Methyl tert butyl ether	ND	ug/l	40.0
Naphthalene	ND	ug/l	200.

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	112.	%	70-130
2,5-Dibromotoluene-FID	113.	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-16
SH-4

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	1001 16:40	1003 02:56	BJ

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? NO
1. One or more of the EPH LCS recoveries were less than 40%.
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	2820	ug/l	112.
C19-C36 Aliphatics	147.	ug/l	112.
C11-C22 Aromatics, Unadjusted	294.	ug/l	112.
C11-C22 Aromatics, Adjusted	294.	ug/l	112.
Naphthalene	ND	ug/l	22.5
2-Methylnaphthalene	ND	ug/l	22.5
Acenaphthylene	ND	ug/l	22.5
Acenaphthene	ND	ug/l	22.5
Fluorene	ND	ug/l	22.5
Phenanthrene	ND	ug/l	22.5
Anthracene	ND	ug/l	22.5
Fluoranthene	ND	ug/l	22.5
Pyrene	ND	ug/l	22.5
Benzo(a)anthracene	ND	ug/l	22.5
Chrysene	ND	ug/l	22.5
Benzo(b)fluoranthene	ND	ug/l	22.5
Benzo(k)fluoranthene	ND	ug/l	22.5
Benzo(a)pyrene	ND	ug/l	22.5
Indeno(1,2,3-cd)Pyrene	ND	ug/l	22.5
Dibenzo(a,h)anthracene	ND	ug/l	22.5
Benzo(g,h,i)perylene	ND	ug/l	22.5

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	44.0	%	40-140
o-Terphenyl	75.0	%	40-140
2-Fluorobiphenyl	67.0	%	40-140
2-Bromonaphthalene	67.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309656-17
SH-5
Sample Matrix: WATER

Date Collected: 25-SEP-2003 12:45
Date Received : 25-SEP-2003
Date Reported : 03-OCT-2003

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260				1 8260B		1001 00:25	RY
Methylene chloride	ND	ug/l	12.				
1,1-Dichloroethane	ND	ug/l	1.9				
Chloroform	ND	ug/l	1.9				
Carbon tetrachloride	ND	ug/l	1.2				
1,2-Dichloropropane	ND	ug/l	4.4				
Dibromochloromethane	ND	ug/l	1.2				
1,1,2-Trichloroethane	ND	ug/l	1.9				
Tetrachloroethene	ND	ug/l	1.2				
Chlorobenzene	ND	ug/l	1.2				
Trichlorofluoromethane	ND	ug/l	6.2				
1,2-Dichloroethane	ND	ug/l	1.2				
1,1,1-Trichloroethane	ND	ug/l	1.2				
Bromodichloromethane	ND	ug/l	1.2				
trans-1,3-Dichloropropene	ND	ug/l	1.2				
cis-1,3-Dichloropropene	ND	ug/l	1.2				
Bromoform	ND	ug/l	5.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	1.2				
Chloromethane	ND	ug/l	6.2				
Bromomethane	ND	ug/l	2.5				
Vinyl chloride	ND	ug/l	2.5				
Chloroethane	ND	ug/l	2.5				
1,1-Dichloroethene	ND	ug/l	1.2				
trans-1,2-Dichloroethene	ND	ug/l	1.9				
Trichloroethene	ND	ug/l	1.2				
1,2-Dichlorobenzene	ND	ug/l	6.2				
1,3-Dichlorobenzene	ND	ug/l	6.2				
1,4-Dichlorobenzene	ND	ug/l	6.2				
cis-1,2-Dichloroethene	ND	ug/l	1.2				
Dichlorodifluoromethane	ND	ug/l	12.				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	110.	%	
Toluene-d8	99.0	%	
4-Bromofluorobenzene	115.	%	
Dibromofluoromethane	102.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-17
SH-5

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1001 15:21	MH

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Unadjusted	427.	ug/l	40.0
C9-C10 Aromatics	343.	ug/l	40.0
C5-C8 Aliphatics, Adjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Adjusted	84.3	ug/l	40.0
Benzene	ND	ug/l	2.00
Toluene	ND	ug/l	2.00
Ethylbenzene	ND	ug/l	2.00
p/m-Xylene	ND	ug/l	2.00
o-Xylene	ND	ug/l	2.00
Methyl tert butyl ether	ND	ug/l	4.00
Naphthalene	ND	ug/l	20.0

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	117.	%	70-130
2,5-Dibromotoluene-FID	116.	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-17
SH-5

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	1001 14:15	1002 20:58	BJ

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? NO
1. One or more of the extraction surrogate recoveries were less than 40%.
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	ug/l	111.
C19-C36 Aliphatics	ND	ug/l	111.
C11-C22 Aromatics, Unadjusted	ND	ug/l	111.
C11-C22 Aromatics, Adjusted	ND	ug/l	111.
Naphthalene	ND	ug/l	22.2
2-Methylnaphthalene	ND	ug/l	22.2
Acenaphthylene	ND	ug/l	22.2
Acenaphthene	ND	ug/l	22.2
Fluorene	ND	ug/l	22.2
Phenanthrene	ND	ug/l	22.2
Anthracene	ND	ug/l	22.2
Fluoranthene	ND	ug/l	22.2
Pyrene	ND	ug/l	22.2
Benzo(a)anthracene	ND	ug/l	22.2
Chrysene	ND	ug/l	22.2
Benzo(b)fluoranthene	ND	ug/l	22.2
Benzo(k)fluoranthene	ND	ug/l	22.2
Benzo(a)pyrene	ND	ug/l	22.2
Indeno(1,2,3-cd)Pyrene	ND	ug/l	22.2
Dibenzo(a,h)anthracene	ND	ug/l	22.2
Benzo(g,h,i)perylene	ND	ug/l	22.2

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	34.0	%	40-140
o-Terphenyl	69.0	%	40-140
2-Fluorobiphenyl	72.0	%	40-140
2-Bromonaphthalene	77.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309656-18 SH-6
Sample Matrix: WATER

Date Collected: 25-SEP-2003 12:00
Date Received : 25-SEP-2003
Date Reported : 03-OCT-2003

Condition of Sample: Satisfactory
Field Prep: None

Number & Type of Containers: 2-Amber,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260				1 8260B		0930 22:40	RY
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	108.	%	
Toluene-d8	102.	%	
4-Bromofluorobenzene	108.	%	
Dibromofluoromethane	103.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-18
SH-6

PARAMETER	RESULT	UNITS	RDL	REP METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1001 20:21	MH

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C10 Aromatics	ND	ug/l	40.0
C5-C8 Aliphatics, Adjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Adjusted	ND	ug/l	40.0
Benzene	ND	ug/l	2.00
Toluene	ND	ug/l	2.00
Ethylbenzene	ND	ug/l	2.00
p/m-Xylene	ND	ug/l	2.00
o-Xylene	ND	ug/l	2.00
Methyl tert butyl ether	ND	ug/l	4.00
Naphthalene	ND	ug/l	20.0

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	91.0	%	70-130
2,5-Dibromotoluene-FID	98.0	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-18
SH-6

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	1001 14:15	1002 21:47	BJ

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? NO
1. One or more of the extraction surrogate recoveries were less than 40%.
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	ug/l	120.
C19-C36 Aliphatics	ND	ug/l	120.
C11-C22 Aromatics, Unadjusted	ND	ug/l	120.
C11-C22 Aromatics, Adjusted	ND	ug/l	120.
Naphthalene	ND	ug/l	24.1
2-Methylnaphthalene	ND	ug/l	24.1
Acenaphthylene	ND	ug/l	24.1
Acenaphthene	ND	ug/l	24.1
Fluorene	ND	ug/l	24.1
Phenanthrene	ND	ug/l	24.1
Anthracene	ND	ug/l	24.1
Fluoranthene	ND	ug/l	24.1
Pyrene	ND	ug/l	24.1
Benzo(a)anthracene	ND	ug/l	24.1
Chrysene	ND	ug/l	24.1
Benzo(b)fluoranthene	ND	ug/l	24.1
Benzo(k)fluoranthene	ND	ug/l	24.1
Benzo(a)pyrene	ND	ug/l	24.1
Indeno(1,2,3-cd)Pyrene	ND	ug/l	24.1
Dibenzo(a,h)anthracene	ND	ug/l	24.1
Benzo(g,h,i)perylene	ND	ug/l	24.1

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	30.0	%	40-140
o-Terphenyl	69.0	%	40-140
2-Fluorobiphenyl	65.0	%	40-140
2-Bromonaphthalene	73.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309656-19
SH-7
Sample Matrix: WATER

Date Collected: 25-SEP-2003 11:00
Date Received : 25-SEP-2003
Date Reported : 03-OCT-2003

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260				1 8260B		0930 23:15	RY
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	0.58	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
cis-1,2-Dichloroethene	5.9	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	111.	%	
Toluene-d8	100.	%	
4-Bromofluorobenzene	130.	%	
Dibromofluoromethane	105.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-19
SH-7

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1001 21:11	MH

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Unadjusted	218.	ug/l	40.0
C9-C10 Aromatics	165.	ug/l	40.0
C5-C8 Aliphatics, Adjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Adjusted	53.3	ug/l	40.0
Benzene	ND	ug/l	2.00
Toluene	ND	ug/l	2.00
Ethylbenzene	ND	ug/l	2.00
p/m-Xylene	ND	ug/l	2.00
o-Xylene	ND	ug/l	2.00
Methyl tert butyl ether	ND	ug/l	4.00
Naphthalene	ND	ug/l	20.0

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	96.0	%	70-130
2,5-Dibromotoluene-FID	98.0	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-19
SH-7

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	1001 14:15	1002 22:36	BJ

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? NO
1. One or more of the extraction surrogate recoveries were less than 40%.
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	ug/l	116.
C19-C36 Aliphatics	ND	ug/l	116.
C11-C22 Aromatics, Unadjusted	ND	ug/l	116.
C11-C22 Aromatics, Adjusted	ND	ug/l	116.
Naphthalene	ND	ug/l	23.2
2-Methylnaphthalene	ND	ug/l	23.2
Acenaphthylene	ND	ug/l	23.2
Acenaphthene	ND	ug/l	23.2
Fluorene	ND	ug/l	23.2
Phenanthrene	ND	ug/l	23.2
Anthracene	ND	ug/l	23.2
Fluoranthene	ND	ug/l	23.2
Pyrene	ND	ug/l	23.2
Benzo(a)anthracene	ND	ug/l	23.2
Chrysene	ND	ug/l	23.2
Benzo(b)fluoranthene	ND	ug/l	23.2
Benzo(k)fluoranthene	ND	ug/l	23.2
Benzo(a)pyrene	ND	ug/l	23.2
Indeno(1,2,3-cd)Pyrene	ND	ug/l	23.2
Dibenzo(a,h)anthracene	ND	ug/l	23.2
Benzo(g,h,i)perylene	ND	ug/l	23.2

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	20.0	%	40-140
o-Terphenyl	70.0	%	40-140
2-Fluorobiphenyl	65.0	%	40-140
2-Bromonaphthalene	68.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309656-20
GP-1
Sample Matrix: WATER

Date Collected: 25-SEP-2003 12:45
Date Received : 25-SEP-2003
Date Reported : 03-OCT-2003

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260				1 8260B		0930 03:37	BT
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	95.0	%	
Toluene-d8	94.0	%	
4-Bromofluorobenzene	123.	%	
Dibromofluoromethane	91.0	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-20
GP-1

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1001 22:01	MH

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Unadjusted	414.	ug/l	40.0
C9-C10 Aromatics	354.	ug/l	40.0
C5-C8 Aliphatics, Adjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Adjusted	59.4	ug/l	40.0
Benzene	ND	ug/l	2.00
Toluene	ND	ug/l	2.00
Ethylbenzene	ND	ug/l	2.00
p/m-Xylene	ND	ug/l	2.00
o-Xylene	ND	ug/l	2.00
Methyl tert butyl ether	ND	ug/l	4.00
Naphthalene	ND	ug/l	20.0

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	101.	%	70-130
2,5-Dibromotoluene-FID	95.0	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-20
GP-1

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	1001 16:40	1003 03:41	BJ

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? NO
1. One or more of the EPH LCS recoveries were less than 40%.
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	ug/l	109.
C19-C36 Aliphatics	ND	ug/l	109.
C11-C22 Aromatics, Unadjusted	ND	ug/l	109.
C11-C22 Aromatics, Adjusted	ND	ug/l	109.
Naphthalene	ND	ug/l	21.7
2-Methylnaphthalene	ND	ug/l	21.7
Acenaphthylene	ND	ug/l	21.7
Acenaphthene	ND	ug/l	21.7
Fluorene	ND	ug/l	21.7
Phenanthrene	ND	ug/l	21.7
Anthracene	ND	ug/l	21.7
Fluoranthene	ND	ug/l	21.7
Pyrene	ND	ug/l	21.7
Benzo(a)anthracene	ND	ug/l	21.7
Chrysene	ND	ug/l	21.7
Benzo(b)fluoranthene	ND	ug/l	21.7
Benzo(k)fluoranthene	ND	ug/l	21.7
Benzo(a)pyrene	ND	ug/l	21.7
Indeno(1,2,3-cd)Pyrene	ND	ug/l	21.7
Dibenzo(a,h)anthracene	ND	ug/l	21.7
Benzo(g,h,i)perylene	ND	ug/l	21.7

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	59.0	%	40-140
o-Terphenyl	78.0	%	40-140
2-Fluorobiphenyl	75.0	%	40-140
2-Bromonaphthalene	75.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309656-21 GP-4
Sample Matrix: WATER

Date Collected: 25-SEP-2003 11:00
Date Received : 25-SEP-2003
Date Reported : 03-OCT-2003

Condition of Sample: Satisfactory
Field Prep: None

Number & Type of Containers: 2-Amber,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260				1 8260B		1002 11:26	RY
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	101.	%	
Toluene-d8	101.	%	
4-Bromofluorobenzene	106.	%	
Dibromofluoromethane	101.	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-21
GP-4

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1001 22:51 MM	

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C10 Aromatics	ND	ug/l	40.0
C5-C8 Aliphatics, Adjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Adjusted	ND	ug/l	40.0
Benzene	ND	ug/l	2.00
Toluene	ND	ug/l	2.00
Ethylbenzene	ND	ug/l	2.00
p/m-Xylene	ND	ug/l	2.00
o-Xylene	ND	ug/l	2.00
Methyl tert butyl ether	ND	ug/l	4.00
Naphthalene	ND	ug/l	20.0

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	104.	%	70-130
2,5-Dibromotoluene-FID	108.	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-21
GP-4

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	1001 16:40	1003 04:27	BJ

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? NO
1. One or more of the EPH LCS recoveries were less than 40%.
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	ug/l	104.
C19-C36 Aliphatics	ND	ug/l	104.
C11-C22 Aromatics, Unadjusted	ND	ug/l	104.
C11-C22 Aromatics, Adjusted	ND	ug/l	104.
Naphthalene	ND	ug/l	20.8
2-Methylnaphthalene	ND	ug/l	20.8
Acenaphthylene	ND	ug/l	20.8
Acenaphthene	ND	ug/l	20.8
Fluorene	ND	ug/l	20.8
Phenanthrene	ND	ug/l	20.8
Anthracene	ND	ug/l	20.8
Fluoranthene	ND	ug/l	20.8
Pyrene	ND	ug/l	20.8
Benzo(a)anthracene	ND	ug/l	20.8
Chrysene	ND	ug/l	20.8
Benzo(b)fluoranthene	ND	ug/l	20.8
Benzo(k)fluoranthene	ND	ug/l	20.8
Benzo(a)pyrene	ND	ug/l	20.8
Indeno(1,2,3-cd)Pyrene	ND	ug/l	20.8
Dibenzo(a,h)anthracene	ND	ug/l	20.8
Benzo(g,h,i)perylene	ND	ug/l	20.8

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	52.0	%	40-140
o-Terphenyl	73.0	%	40-140
2-Fluorobiphenyl	82.0	%	40-140
2-Bromonaphthalene	81.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309656-22
ET-1
Sample Matrix: WATER

Date Collected: 25-SEP-2003 14:45
Date Received : 25-SEP-2003
Date Reported : 03-OCT-2003

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260				1 8260B	0930	05:00	BT
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	94.0	%	
Toluene-d8	94.0	%	
4-Bromofluorobenzene	97.0	%	
Dibromofluoromethane	88.0	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-22
ET-1

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1001 23:41 MM	

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C10 Aromatics	ND	ug/l	40.0
C5-C8 Aliphatics, Adjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Adjusted	ND	ug/l	40.0
Benzene	ND	ug/l	2.00
Toluene	ND	ug/l	2.00
Ethylbenzene	ND	ug/l	2.00
p/m-Xylene	ND	ug/l	2.00
o-Xylene	ND	ug/l	2.00
Methyl tert butyl ether	ND	ug/l	4.00
Naphthalene	ND	ug/l	20.0

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	90.0	%	70-130
2,5-Dibromotoluene-FID	92.0	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-22
ET-1

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	1001 16:40	1003 05:13	BJ

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? NO
1. One or more of the EPH LCS recoveries were less than 40%.
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	ug/l	109.
C19-C36 Aliphatics	ND	ug/l	109.
C11-C22 Aromatics, Unadjusted	ND	ug/l	109.
C11-C22 Aromatics, Adjusted	ND	ug/l	109.
Naphthalene	ND	ug/l	21.7
2-Methylnaphthalene	ND	ug/l	21.7
Acenaphthylene	ND	ug/l	21.7
Acenaphthene	ND	ug/l	21.7
Fluorene	ND	ug/l	21.7
Phenanthrene	ND	ug/l	21.7
Anthracene	ND	ug/l	21.7
Fluoranthene	ND	ug/l	21.7
Pyrene	ND	ug/l	21.7
Benzo(a)anthracene	ND	ug/l	21.7
Chrysene	ND	ug/l	21.7
Benzo(b)fluoranthene	ND	ug/l	21.7
Benzo(k)fluoranthene	ND	ug/l	21.7
Benzo(a)pyrene	ND	ug/l	21.7
Indeno(1,2,3-cd)Pyrene	ND	ug/l	21.7
Dibenzo(a,h)anthracene	ND	ug/l	21.7
Benzo(g,h,i)perylene	ND	ug/l	21.7

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	51.0	%	40-140
o-Terphenyl	80.0	%	40-140
2-Fluorobiphenyl	87.0	%	40-140
2-Bromonaphthalene	87.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309656-23
ET-2
Sample Matrix: WATER

Date Collected: 25-SEP-2003 14:00
Date Received : 25-SEP-2003
Date Reported : 03-OCT-2003

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260				1 8260B		0930 05:41	BT
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	95.0	%	
Toluene-d8	93.0	%	
4-Bromofluorobenzene	138.	%	
Dibromofluoromethane	89.0	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-23
ET-2

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1002 11:03	MM

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Unadjusted	408.	ug/l	40.0
C9-C10 Aromatics	334.	ug/l	40.0
C5-C8 Aliphatics, Adjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Adjusted	73.7	ug/l	40.0
Benzene	ND	ug/l	2.00
Toluene	ND	ug/l	2.00
Ethylbenzene	ND	ug/l	2.00
p/m-Xylene	ND	ug/l	2.00
o-Xylene	ND	ug/l	2.00
Methyl tert butyl ether	ND	ug/l	4.00
Naphthalene	ND	ug/l	20.0

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	115.	%	70-130
2,5-Dibromotoluene-FID	121.	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309656-23
ET-2

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				46 98-1	1001 16:40	1003 05:58	BJ

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? NO
1. One or more of the EPH LCS recoveries were less than 40%.
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	ug/l	108.
C19-C36 Aliphatics	115.	ug/l	108.
C11-C22 Aromatics, Unadjusted	134.	ug/l	108.
C11-C22 Aromatics, Adjusted	134.	ug/l	108.
Naphthalene	ND	ug/l	21.5
2-Methylnaphthalene	ND	ug/l	21.5
Acenaphthylene	ND	ug/l	21.5
Acenaphthene	ND	ug/l	21.5
Fluorene	ND	ug/l	21.5
Phenanthrene	ND	ug/l	21.5
Anthracene	ND	ug/l	21.5
Fluoranthene	ND	ug/l	21.5
Pyrene	ND	ug/l	21.5
Benzo(a)anthracene	ND	ug/l	21.5
Chrysene	ND	ug/l	21.5
Benzo(b)fluoranthene	ND	ug/l	21.5
Benzo(k)fluoranthene	ND	ug/l	21.5
Benzo(a)pyrene	ND	ug/l	21.5
Indeno(1,2,3-cd)Pyrene	ND	ug/l	21.5
Dibenzo(a,h)anthracene	ND	ug/l	21.5
Benzo(g,h,i)perylene	ND	ug/l	21.5

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	72.0	%	40-140
o-Terphenyl	85.0	%	40-140
2-Fluorobiphenyl	86.0	%	40-140
2-Bromonaphthalene	85.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309656-24 **Date Collected:** 22-SEP-2003 09:00
TRIP BLANK-VPH DELUX **Date Received :** 25-SEP-2003
Sample Matrix: WATER **Date Reported :** 03-OCT-2003

Condition of Sample: Satisfactory **Field Prep:** None

Number & Type of Containers: 1-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				47 98-1		1001 14:31	MH

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Unadjusted	ND	ug/l	40.0
C9-C10 Aromatics	ND	ug/l	40.0
C5-C8 Aliphatics, Adjusted	ND	ug/l	40.0
C9-C12 Aliphatics, Adjusted	ND	ug/l	40.0
Benzene	ND	ug/l	2.00
Toluene	ND	ug/l	2.00
Ethylbenzene	ND	ug/l	2.00
p/m-Xylene	ND	ug/l	2.00
o-Xylene	ND	ug/l	2.00
Methyl tert butyl ether	ND	ug/l	4.00
Naphthalene	ND	ug/l	20.0

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	120.	%	70-130
2,5-Dibromotoluene-PID	121.	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309656-25 TRIP BLANK-CVOC 8021
Sample Matrix: WATER
Condition of Sample: Satisfactory
Number & Type of Containers: 1-Vial

Date Collected: 22-SEP-2003 09:00
Date Received : 25-SEP-2003
Date Reported : 03-OCT-2003
Field Prep: None

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260				1 8260B		1001 19:16	BT
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	94.0	%	
Toluene-d8	90.0	%	
4-Bromofluorobenzene	92.0	%	
Dibromofluoromethane	84.0	%	

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0309656

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Solids, Total for sample(s) 01,03,05,07-10 (L0309475-01, WG151684)					
Solids, Total	96.	96.	%	0	
Volatile Organics 8260 via Low 5035 for sample(s) 01,05,08,10,12 (L0309668-02, WG151976)					
Methylene chloride	ND	ND	ug/kg	NC	
1,1-Dichloroethane	ND	ND	ug/kg	NC	
Chloroform	ND	ND	ug/kg	NC	
Carbon tetrachloride	ND	ND	ug/kg	NC	
1,2-Dichloropropane	ND	ND	ug/kg	NC	
Dibromochloromethane	ND	ND	ug/kg	NC	
1,1,2-Trichloroethane	ND	ND	ug/kg	NC	
Tetrachloroethene	ND	ND	ug/kg	NC	
Chlorobenzene	ND	ND	ug/kg	NC	
Trichlorofluoromethane	ND	ND	ug/kg	NC	
1,2-Dichloroethane	ND	ND	ug/kg	NC	
1,1,1-Trichloroethane	ND	ND	ug/kg	NC	
Bromodichloromethane	ND	ND	ug/kg	NC	
trans-1,3-Dichloropropene	ND	ND	ug/kg	NC	
cis-1,3-Dichloropropene	ND	ND	ug/kg	NC	
1,1-Dichloropropene	ND	ND	ug/kg	NC	
Bromoform	ND	ND	ug/kg	NC	
1,1,2,2-Tetrachloroethane	ND	ND	ug/kg	NC	
Benzene	ND	ND	ug/kg	NC	
Toluene	ND	ND	ug/kg	NC	
Ethylbenzene	ND	ND	ug/kg	NC	
Chloromethane	ND	ND	ug/kg	NC	
Bromomethane	ND	ND	ug/kg	NC	
Vinyl chloride	ND	ND	ug/kg	NC	
Chloroethane	ND	ND	ug/kg	NC	
1,1-Dichloroethene	ND	ND	ug/kg	NC	
trans-1,2-Dichloroethene	ND	ND	ug/kg	NC	
Trichloroethene	ND	ND	ug/kg	NC	
1,2-Dichlorobenzene	ND	ND	ug/kg	NC	
1,3-Dichlorobenzene	ND	ND	ug/kg	NC	
1,4-Dichlorobenzene	ND	ND	ug/kg	NC	
Methyl tert butyl ether	ND	ND	ug/kg	NC	
p/m-Xylene	ND	ND	ug/kg	NC	
o-Xylene	ND	ND	ug/kg	NC	
cis-1,2-Dichloroethene	ND	ND	ug/kg	NC	
Dibromomethane	ND	ND	ug/kg	NC	
Iodomethane	ND	ND	ug/kg	NC	
1,2,3-Trichloropropane	ND	ND	ug/kg	NC	
Styrene	ND	ND	ug/kg	NC	
Dichlorodifluoromethane	ND	ND	ug/kg	NC	
Acetone	ND	ND	ug/kg	NC	
Carbon disulfide	ND	ND	ug/kg	NC	
2-Butanone	ND	ND	ug/kg	NC	
Vinyl acetate	ND	ND	ug/kg	NC	
4-Methyl-2-pentanone	ND	ND	ug/kg	NC	

Laboratory Job Number: L0309656

Continued

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Volatile Organics 8260 via Low 5035 for sample(s) 01,05,08,10,12 (L0309668-02, WG151976)					
2-Hexanone	ND	ND	ug/kg	NC	
Acrolein	ND	ND	ug/kg	NC	
Acrylonitrile	ND	ND	ug/kg	NC	
Bromochloromethane	ND	ND	ug/kg	NC	
2,2-Dichloropropane	ND	ND	ug/kg	NC	
1,2-Dibromoethane	ND	ND	ug/kg	NC	
1,3-Dichloropropane	ND	ND	ug/kg	NC	
1,1,1,2-Tetrachloroethane	ND	ND	ug/kg	NC	
Bromobenzene	ND	ND	ug/kg	NC	
n-Butylbenzene	ND	ND	ug/kg	NC	
sec-Butylbenzene	ND	ND	ug/kg	NC	
tert-Butylbenzene	ND	ND	ug/kg	NC	
o-Chlorotoluene	ND	ND	ug/kg	NC	
p-Chlorotoluene	ND	ND	ug/kg	NC	
1,2-Dibromo-3-chloropropane	ND	ND	ug/kg	NC	
Hexachlorobutadiene	ND	ND	ug/kg	NC	
Isopropylbenzene	ND	ND	ug/kg	NC	
p-Isopropyltoluene	ND	ND	ug/kg	NC	
Naphthalene	ND	ND	ug/kg	NC	
n-Propylbenzene	ND	ND	ug/kg	NC	
1,2,3-Trichlorobenzene	ND	ND	ug/kg	NC	
1,2,4-Trichlorobenzene	ND	ND	ug/kg	NC	
1,3,5-Trimethylbenzene	ND	ND	ug/kg	NC	
1,2,4-Trimethylbenzene	ND	ND	ug/kg	NC	
trans-1,4-Dichloro-2-butene	ND	ND	ug/kg	NC	
Surrogate(s)	Recovery				QC Criteria
1,2-Dichloroethane-d4	111.	112.	%	1	
Toluene-d8	125.	125.	%	0	
4-Bromofluorobenzene	136.	136.	%	0	
Dibromofluoromethane	109.	109.	%	0	
Volatile Petroleum Hydrocarbons for sample(s) 01,03,05,07-08,10-11 (L0309639-01, WG151842)					
C5-C8 Aliphatics	ND	ND	mg/kg	NC	50
C9-C12 Aliphatics	13.0	13.2	mg/kg	2	50
C9-C10 Aromatics	6.78	7.40	mg/kg	9	50
C5-C8 Aliphatics, Adjusted	ND	ND	mg/kg	NC	50
C9-C12 Aliphatics, Adjusted	6.28	5.80	mg/kg	8	50
Benzene	ND	ND	mg/kg	NC	50
Toluene	ND	ND	mg/kg	NC	50
Ethylbenzene	ND	ND	mg/kg	NC	50
p/m-Xylene	ND	ND	mg/kg	NC	50
o-Xylene	ND	ND	mg/kg	NC	50
Methyl tert butyl ether	ND	ND	mg/kg	NC	50
Naphthalene	ND	ND	mg/kg	NC	50

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0309656

Continued

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Volatile Petroleum Hydrocarbons for sample(s) 01,03,05,07-08,10-11 (L0309639-01, WG151842)					
Surrogate(s)	Recovery				QC Criteria
2,5-Dibromotoluene-PID	92.0	95.0	%	3	70-130
2,5-Dibromotoluene-FID	91.0	90.0	%	1	70-130
Volatile Petroleum Hydrocarbons for sample(s) 09 (L0309685-02, WG152220)					
C5-C8 Aliphatics	ND	ND	mg/kg	NC	50
C9-C12 Aliphatics	ND	ND	mg/kg	NC	50
C9-C10 Aromatics	ND	ND	mg/kg	NC	50
C5-C8 Aliphatics, Adjusted	ND	ND	mg/kg	NC	50
C9-C12 Aliphatics, Adjusted	ND	ND	mg/kg	NC	50
Benzene	ND	ND	mg/kg	NC	50
Toluene	ND	ND	mg/kg	NC	50
Ethylbenzene	ND	ND	mg/kg	NC	50
p/m-Xylene	ND	ND	mg/kg	NC	50
o-Xylene	ND	ND	mg/kg	NC	50
Methyl tert butyl ether	ND	ND	mg/kg	NC	50
Naphthalene	ND	ND	mg/kg	NC	50
Surrogate(s)	Recovery				QC Criteria
2,5-Dibromotoluene-PID	96.0	96.0	%	0	70-130
2,5-Dibromotoluene-FID	115.	119.	%	3	70-130
Volatile Petroleum Hydrocarbons for sample(s) 13-20,24 (L0309603-01, WG152128)					
C5-C8 Aliphatics	ND	ND	ug/l	NC	50
C9-C12 Aliphatics	ND	ND	ug/l	NC	50
C9-C10 Aromatics	ND	ND	ug/l	NC	50
C5-C8 Aliphatics, Adjusted	ND	ND	ug/l	NC	50
C9-C12 Aliphatics, Adjusted	ND	ND	ug/l	NC	50
Benzene	ND	ND	ug/l	NC	50
Toluene	ND	ND	ug/l	NC	50
Ethylbenzene	ND	ND	ug/l	NC	50
p/m-Xylene	ND	ND	ug/l	NC	50
o-Xylene	ND	ND	ug/l	NC	50
Methyl tert butyl ether	ND	ND	ug/l	NC	50
Naphthalene	ND	ND	ug/l	NC	50
Surrogate(s)	Recovery				QC Criteria
2,5-Dibromotoluene-PID	87.0	78.0	%	11	70-130
2,5-Dibromotoluene-FID	91.0	88.0	%	3	70-130
Volatile Petroleum Hydrocarbons for sample(s) 21-23 (L0309752-02, WG152226)					
C5-C8 Aliphatics	ND	ND	ug/l	NC	50
C9-C12 Aliphatics	ND	ND	ug/l	NC	50
C9-C10 Aromatics	ND	ND	ug/l	NC	50
C5-C8 Aliphatics, Adjusted	ND	ND	ug/l	NC	50
C9-C12 Aliphatics, Adjusted	ND	ND	ug/l	NC	50
Benzene	ND	ND	ug/l	NC	50

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0309656

Continued

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Volatile Petroleum Hydrocarbons for sample(s) 21-23 (L0309752-02, WG152226)					
Toluene	ND	ND	ug/l	NC	50
Ethylbenzene	ND	ND	ug/l	NC	50
p/m-Xylene	ND	ND	ug/l	NC	50
o-Xylene	ND	ND	ug/l	NC	50
Methyl tert butyl ether	ND	ND	ug/l	NC	50
Naphthalene	ND	ND	ug/l	NC	50
Surrogate(s)	Recovery				QC Criteria
2,5-Dibromotoluene-PID	103.	96.0	%	7	70-130
2,5-Dibromotoluene-FID	105.	98.0	%	7	70-130
Extractable Petroleum Hydrocarbons for sample(s) 01,03,05,07-10 (L0309639-01, WG151709)					
C9-C18 Aliphatics	170.	158.	mg/kg	7	50
C19-C36 Aliphatics	101.	88.5	mg/kg	13	50
C11-C22 Aromatics	149.	144.	mg/kg	3	50
C11-C22 Aromatics, Adjusted	149.	144.	mg/kg	3	50
Naphthalene	ND	ND	mg/kg	NC	50
2-Methylnaphthalene	ND	ND	mg/kg	NC	50
Acenaphthylene	ND	ND	mg/kg	NC	50
Acenaphthene	ND	ND	mg/kg	NC	50
Fluorene	ND	ND	mg/kg	NC	50
Phenanthrene	ND	ND	mg/kg	NC	50
Anthracene	ND	ND	mg/kg	NC	50
Fluoranthene	ND	ND	mg/kg	NC	50
Pyrene	ND	ND	mg/kg	NC	50
Benzo(a)anthracene	ND	ND	mg/kg	NC	50
Chrysene	ND	ND	mg/kg	NC	50
Benzo(b)fluoranthene	ND	ND	mg/kg	NC	50
Benzo(k)fluoranthene	ND	ND	mg/kg	NC	50
Benzo(a)pyrene	ND	ND	mg/kg	NC	50
Indeno(1,2,3-cd)Pyrene	ND	ND	mg/kg	NC	50
Dibenzo(a,h)anthracene	ND	ND	mg/kg	NC	50
Benzo(ghi)perylene	ND	ND	mg/kg	NC	50
Surrogate(s)	Recovery				QC Criteria
Chloro-Octadecane	71.0	66.0	%	7	40-140
o-Terphenyl	79.0	96.0	%	19	40-140
2-Fluorobiphenyl	79.0	75.0	%	5	40-140
2-Bromonaphthalene	78.0	92.0	%	16	40-140
Extractable Petroleum Hydrocarbons for sample(s) 15,17-19 (L0309782-06, WG152328)					
C9-C18 Aliphatics	1770	1330	ug/l	28	50
C19-C36 Aliphatics	2270	1810	ug/l	23	50
C11-C22 Aromatics	1170	1280	ug/l	9	50
C11-C22 Aromatics, Adjusted	1170	1280	ug/l	9	50
Naphthalene	ND	ND	ug/l	NC	50
2-Methylnaphthalene	ND	ND	ug/l	NC	50
Acenaphthylene	ND	ND	ug/l	NC	50

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0309656

Continued

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Extractable Petroleum Hydrocarbons for sample(s) 15,17-19 (L0309782-06, WG152328)					
Acenaphthene	ND	ND	ug/l	NC	50
Fluorene	ND	ND	ug/l	NC	50
Phenanthrene	ND	ND	ug/l	NC	50
Anthracene	ND	ND	ug/l	NC	50
Fluoranthene	ND	ND	ug/l	NC	50
Pyrene	ND	ND	ug/l	NC	50
Benzo(a)anthracene	ND	ND	ug/l	NC	50
Chrysene	ND	ND	ug/l	NC	50
Benzo(b)fluoranthene	ND	ND	ug/l	NC	50
Benzo(k)fluoranthene	ND	ND	ug/l	NC	50
Benzo(a)pyrene	ND	ND	ug/l	NC	50
Indeno(1,2,3-cd)Pyrene	ND	ND	ug/l	NC	50
Dibenzo(a,h)anthracene	ND	ND	ug/l	NC	50
Benzo(ghi)perylene	ND	ND	ug/l	NC	50
Surrogate(s)	Recovery				QC Criteria
Chloro-Octadecane	81.0	62.0	%	27	40-140
o-Terphenyl	80.0	87.0	%	8	40-140
2-Fluorobiphenyl	62.0	64.0	%	3	40-140
2-Bromonaphthalene	69.0	71.0	%	3	40-140

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0309656

Parameter	% Recovery	QC Criteria
Volatile Organics by GC/MS 8260 LCS for sample(s) 20,22-23 (WG151999)		
Chlorobenzene	98	
Benzene	86	
Toluene	98	
1,1-Dichloroethene	93	
Trichloroethene	98	
Surrogate(s)		
1,2-Dichloroethane-d4	97	
Toluene-d8	97	
4-Bromofluorobenzene	96	
Dibromofluoromethane	100	
Volatile Organics by GC/MS 8260 LCS for sample(s) 25 (WG151999)		
Chlorobenzene	97	
Benzene	86	
Toluene	96	
1,1-Dichloroethene	91	
Trichloroethene	95	
Surrogate(s)		
1,2-Dichloroethane-d4	95	
Toluene-d8	92	
4-Bromofluorobenzene	95	
Dibromofluoromethane	94	
Volatile Organics by GC/MS 8260 LCS for sample(s) 16-19 (WG152003)		
Chlorobenzene	97	
Benzene	96	
Toluene	96	
1,1-Dichloroethene	87	
Trichloroethene	95	
Surrogate(s)		
1,2-Dichloroethane-d4	104	
Toluene-d8	101	
4-Bromofluorobenzene	104	
Dibromofluoromethane	102	
Volatile Organics by GC/MS 8260 LCS for sample(s) 21 (WG152238)		
Chlorobenzene	91	
Benzene	83	
Toluene	93	
1,1-Dichloroethene	85	
Trichloroethene	91	
Surrogate(s)		
1,2-Dichloroethane-d4	101	
Toluene-d8	101	

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0309656

Continued

Parameter	% Recovery	QC Criteria
Volatile Organics by GC/MS 8260 LCS for sample(s) 21 (WG152238)		
4-Bromofluorobenzene	99	
Dibromofluoromethane	99	
Volatile Organics by GC/MS 8260 LCS for sample(s) 13-15 (WG152003)		
Chlorobenzene	91	
Benzene	91	
Toluene	91	
1,1-Dichloroethene	85	
Trichloroethene	93	
Surrogate(s)		
1,2-Dichloroethane-d4	105	
Toluene-d8	100	
4-Bromofluorobenzene	101	
Dibromofluoromethane	105	
Volatile Organics 8260 via Low 5035 LCS for sample(s) 01,05,08,12 (WG151976)		
Chlorobenzene	94	
Benzene	101	
Toluene	98	
1,1-Dichloroethene	87	
Trichloroethene	99	
Surrogate(s)		
1,2-Dichloroethane-d4	106	
Toluene-d8	119	
4-Bromofluorobenzene	114	
Dibromofluoromethane	105	
Volatile Organics 8260 via Low 5035 LCS for sample(s) 10 (WG151976)		
Chlorobenzene	96	
Benzene	100	
Toluene	97	
1,1-Dichloroethene	87	
Trichloroethene	99	
Surrogate(s)		
1,2-Dichloroethane-d4	97	
Toluene-d8	113	
4-Bromofluorobenzene	104	
Dibromofluoromethane	101	
Volatile Organics 8260 via High 5035 LCS for sample(s) 03,07,09 (WG151918)		
Chlorobenzene	99	
Benzene	100	
Toluene	99	
1,1-Dichloroethene	89	
Trichloroethene	105	

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0309656

Continued

Parameter	% Recovery	QC Criteria
Volatile Organics 8260 via High 5035 LCS for sample(s) 03,07,09 (WG151918)		
Surrogate(s)		
1,2-Dichloroethane-d4	103	
Toluene-d8	114	
4-Bromofluorobenzene	108	
Dibromofluoromethane	103	
Volatile Petroleum Hydrocarbons LCS for sample(s) 01,03,05,07-08,10-11 (WG151842)		
Benzene	95	70-130
Toluene	93	70-130
Ethylbenzene	91	70-130
p/m-Xylene	92	70-130
o-Xylene	92	70-130
Methyl tert butyl ether	98	70-130
Naphthalene	109	70-130
Surrogate(s)		
2,5-Dibromotoluene-PID	104	70-130
2,5-Dibromotoluene-FID	109	70-130
Volatile Petroleum Hydrocarbons LCS for sample(s) 13-20,24 (WG152128)		
Benzene	101	70-130
Toluene	100	70-130
Ethylbenzene	91	70-130
p/m-Xylene	96	70-130
o-Xylene	97	70-130
Methyl tert butyl ether	104	70-130
Naphthalene	106	70-130
Surrogate(s)		
2,5-Dibromotoluene-PID	108	70-130
2,5-Dibromotoluene-FID	105	70-130
Volatile Petroleum Hydrocarbons LCS for sample(s) 09 (WG152220)		
Benzene	103	70-130
Toluene	97	70-130
Ethylbenzene	111	70-130
p/m-Xylene	103	70-130
o-Xylene	103	70-130
Methyl tert butyl ether	95	70-130
Naphthalene	109	70-130
Surrogate(s)		
2,5-Dibromotoluene-PID	108	70-130
2,5-Dibromotoluene-FID	116	70-130

Laboratory Job Number: L0309656

Continued

Parameter	% Recovery	QC Criteria
Volatile Petroleum Hydrocarbons LCS for sample(s) 21-23 (WG152226)		
Benzene	97	70-130
Toluene	97	70-130
Ethylbenzene	89	70-130
p/m-Xylene	93	70-130
o-Xylene	96	70-130
Methyl tert butyl ether	99	70-130
Naphthalene	118	70-130
Surrogate(s)		
2,5-Dibromotoluene-PID	127	70-130
2,5-Dibromotoluene-FID	129	70-130
Extractable Petroleum Hydrocarbons LCS for sample(s) 01,03,05,07-10 (WG151709)		
Naphthalene	47	40-140
Acenaphthene	50	40-140
Anthracene	75	40-140
Pyrene	82	40-140
Chrysene	81	40-140
Nonane (C9)	40	40-140
Tetradecane (C14)	56	40-140
Nonadecane (C19)	75	40-140
Eicosane (C20)	78	40-140
Octacosane (C28)	78	40-140
Surrogate(s)		
Chloro-Octadecane	55	40-140
o-Terphenyl	80	40-140
2-Fluorobiphenyl	69	40-140
2-Bromonaphthalene	71	40-140
Extractable Petroleum Hydrocarbons LCS for sample(s) 15,17-19 (WG152328)		
Naphthalene	43	40-140
Acenaphthene	51	40-140
Anthracene	77	40-140
Pyrene	86	40-140
Chrysene	92	40-140
Nonane (C9)	41	40-140
Tetradecane (C14)	62	40-140
Nonadecane (C19)	91	40-140
Eicosane (C20)	94	40-140
Octacosane (C28)	93	40-140
Surrogate(s)		
Chloro-Octadecane	72	40-140
o-Terphenyl	77	40-140
2-Fluorobiphenyl	67	40-140
2-Bromonaphthalene	70	40-140

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0309656

Continued

Parameter	% Recovery	QC Criteria
Extractable Petroleum Hydrocarbons LCS for sample(s) 13-14,16,20-23 (WG152327)		
Naphthalene	50	40-140
Acenaphthene	58	40-140
Anthracene	86	40-140
Pyrene	81	40-140
Chrysene	84	40-140
Nonane (C9)	39	40-140
Tetradecane (C14)	55	40-140
Nonadecane (C19)	71	40-140
Eicosane (C20)	74	40-140
Octacosane (C28)	74	40-140
Surrogate(s)		
Chloro-Octadecane	59	40-140
o-Terphenyl	96	40-140
2-Fluorobiphenyl	75	40-140
2-Bromonaphthalene	78	40-140
Extractable Petroleum Hydrocarbons LCS for sample(s) 13-14,16,20-23 (WG152327)		
Naphthalene	51	40-140
Acenaphthene	57	40-140
Anthracene	82	40-140
Pyrene	85	40-140
Chrysene	88	40-140
Nonane (C9)	48	40-140
Tetradecane (C14)	64	40-140
Nonadecane (C19)	84	40-140
Eicosane (C20)	87	40-140
Octacosane (C28)	86	40-140
Surrogate(s)		
Chloro-Octadecane	71	40-140
o-Terphenyl	85	40-140
2-Fluorobiphenyl	71	40-140
2-Bromonaphthalene	72	40-140
Extractable Petroleum Hydrocarbons SPIKE for sample(s) 15,17-19 (L0309782-06, WG152328)		
Naphthalene	36	40-140
Acenaphthene	47	40-140
Anthracene	67	40-140
Pyrene	75	40-140
Chrysene	75	40-140
Nonane (C9)	44	40-140
Tetradecane (C14)	63	40-140
Nonadecane (C19)	77	40-140
Eicosane (C20)	78	40-140
Octacosane (C28)	79	40-140

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0309656

Continued

Parameter	% Recovery	QC Criteria
Extractable Petroleum Hydrocarbons SPIKE for sample(s) 15,17-19 (L0309782-06, WG152328)		
Surrogate(s)		
Chloro-Octadecane	65	40-140
o-Terphenyl	76	40-140
2-Fluorobiphenyl	53	40-140
2-Bromonaphthalene	54	40-140

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

Laboratory Job Number: L0309656

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
Volatile Organics by GC/MS 8260 for sample(s) 20,22-23,25 (L0309655-29, WG151999)					
Chlorobenzene	101	100	1		
Benzene	83	82	1		
Toluene	102	103	1		
1,1-Dichloroethene	99	100	1		
Trichloroethene	95	94	1		
Surrogate(s)					
1,2-Dichloroethane-d4	183	170	7		
Toluene-d8	182	183	1		
4-Bromofluorobenzene	160	160	0		
Dibromofluoromethane	183	179	2		
Volatile Organics by GC/MS 8260 for sample(s) 13-19 (L0309620-02, WG152003)					
Chlorobenzene	86	86	1		
Benzene	87	92	5		
Toluene	86	88	2		
1,1-Dichloroethene	73	78	6		
Trichloroethene	81	86	6		
Surrogate(s)					
1,2-Dichloroethane-d4	109	115	5		
Toluene-d8	106	108	2		
4-Bromofluorobenzene	100	105	5		
Dibromofluoromethane	109	113	4		
Volatile Organics by GC/MS 8260 for sample(s) 21 (L0309656-21, WG152238)					
Chlorobenzene	95	94	2		
Benzene	88	87	2		
Toluene	98	98	0		
1,1-Dichloroethene	108	104	4		
Trichloroethene	104	102	2		
Surrogate(s)					
1,2-Dichloroethane-d4	116	115	1		
Toluene-d8	115	115	0		
4-Bromofluorobenzene	109	109	0		
Dibromofluoromethane	115	114	1		
Volatile Organics 8260 via High 5035 for sample(s) 03,07,09 (L0309684-04, WG151918)					
Chlorobenzene	98	96	2		
Benzene	100	101	1		
Toluene	100	99	1		
1,1-Dichloroethene	82	85	3		
Trichloroethene	102	102	0		
Surrogate(s)					
1,2-Dichloroethane-d4	99	102	3		
Toluene-d8	115	115	0		

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

Laboratory Job Number: L0309656

Continued

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
Volatile Organics 8260 via High 5035 for sample(s) 03,07,09 (L0309684-04, WG151918)					
4-Bromofluorobenzene	106	106	0		
Dibromofluoromethane	101	102	1		

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0309656

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 20,22-23 (WG151999-4)							
Volatile Organics by GC/MS 8260				1 8260B		0929 18:40	ET
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
1,1-Dichloropropene	ND	ug/l	2.5				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Benzene	ND	ug/l	0.50				
Toluene	ND	ug/l	0.75				
Ethylbenzene	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
p/m-Xylene	ND	ug/l	0.50				
o-Xylene	ND	ug/l	0.50				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,4-Dichlorobutane	ND	ug/l	5.0				
Iodomethane	ND	ug/l	5.0				
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
Vinyl acetate	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				

Laboratory Job Number: L0309656

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 20,22-23 (WG151999-4)							
Volatile Organics by GC/MS 8260 continued				1 8260B		0929 18:40	ET
Ethyl methacrylate	ND	ug/l	5.0				
Acrolein	ND	ug/l	12.				
Acrylonitrile	ND	ug/l	5.0				
Bromochloromethane	ND	ug/l	2.5				
Tetrahydrofuran	ND	ug/l	10.				
2,2-Dichloropropane	ND	ug/l	2.5				
1,2-Dibromoethane	ND	ug/l	2.5				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
Bromobenzene	ND	ug/l	2.5				
n-Butylbenzene	ND	ug/l	0.50				
sec-Butylbenzene	ND	ug/l	0.50				
tert-Butylbenzene	ND	ug/l	2.5				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	2.5				
Isopropylbenzene	ND	ug/l	0.50				
p-Isopropyltoluene	ND	ug/l	0.50				
Naphthalene	ND	ug/l	2.5				
n-Propylbenzene	ND	ug/l	0.50				
1,2,3-Trichlorobenzene	ND	ug/l	2.5				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
1,3,5-Trimethylbenzene	ND	ug/l	2.5				
1,2,4-Trimethylbenzene	ND	ug/l	2.5				
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5				
Ethyl ether	ND	ug/l	2.5				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	100.	%	
Toluene-d8	97.0	%	
4-Bromofluorobenzene	97.0	%	
Dibromofluoromethane	96.0	%	

Blank Analysis for sample(s) 25 (WG151999-10)							
Volatile Organics by GC/MS 8260				1 8260B		1001 17:43	ET
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0309656

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 25 (WG151999-10)							
Volatile Organics by GC/MS 8260 continued				1 8260B		1001 17:43	ST
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
1,1-Dichloropropene	ND	ug/l	2.5				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Benzene	ND	ug/l	0.50				
Toluene	ND	ug/l	0.75				
Ethylbenzene	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
p/m-Xylene	ND	ug/l	0.50				
o-Xylene	ND	ug/l	0.50				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,4-Dichlorobutane	ND	ug/l	5.0				
Iodomethane	ND	ug/l	5.0				
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
Vinyl acetate	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				
Ethyl methacrylate	ND	ug/l	5.0				
Acrolein	ND	ug/l	12.				
Acrylonitrile	ND	ug/l	5.0				
Bromochloromethane	ND	ug/l	2.5				
Tetrahydrofuran	ND	ug/l	10.				
2,2-Dichloropropane	ND	ug/l	2.5				
1,2-Dibromoethane	ND	ug/l	2.5				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
Bromobenzene	ND	ug/l	2.5				
n-Butylbenzene	ND	ug/l	0.50				

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Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 25 (WG151999-10)							
Volatile Organics by GC/MS 8260 continued				1 8260B		1001 17:43	BT
sec-Butylbenzene	ND	ug/l	0.50				
tert-Butylbenzene	ND	ug/l	2.5				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	2.5				
Isopropylbenzene	ND	ug/l	0.50				
p-Isopropyltoluene	ND	ug/l	0.50				
Naphthalene	ND	ug/l	2.5				
n-Propylbenzene	ND	ug/l	0.50				
1,2,3-Trichlorobenzene	ND	ug/l	2.5				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
1,3,5-Trimethylbenzene	ND	ug/l	2.5				
1,2,4-Trimethylbenzene	ND	ug/l	2.5				
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5				
Ethyl ether	ND	ug/l	2.5				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	94.0	%					
Toluene-d8	92.0	%					
4-Bromofluorobenzene	96.0	%					
Dibromofluoromethane	79.0	%					
Blank Analysis for sample(s) 13-15 (WG152003-6)							
Volatile Organics by GC/MS 8260				1 8260B		0930 09:43	RY
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
1,1-Dichloropropene	ND	ug/l	2.5				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Benzene	ND	ug/l	0.50				
Toluene	ND	ug/l	0.75				
Ethylbenzene	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0309656

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 13-15 (WG152003-6)							
Volatile Organics by GC/MS 8260 continued				1 8260B		0930 09:43	RY
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
p/m-Xylene	ND	ug/l	0.50				
o-Xylene	ND	ug/l	0.50				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,4-Dichlorobutane	ND	ug/l	5.0				
Iodomethane	ND	ug/l	5.0				
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
Vinyl acetate	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				
Ethyl methacrylate	ND	ug/l	5.0				
Acrolein	ND	ug/l	12.				
Acrylonitrile	ND	ug/l	5.0				
Bromochloromethane	ND	ug/l	2.5				
Tetrahydrofuran	ND	ug/l	10.				
2,2-Dichloropropane	ND	ug/l	2.5				
1,2-Dibromoethane	ND	ug/l	2.5				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
Bromobenzene	ND	ug/l	2.5				
n-Butylbenzene	ND	ug/l	0.50				
sec-Butylbenzene	ND	ug/l	0.50				
tert-Butylbenzene	ND	ug/l	2.5				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	2.5				
Isopropylbenzene	ND	ug/l	0.50				
p-Isopropyltoluene	ND	ug/l	0.50				
Naphthalene	ND	ug/l	2.5				
n-Propylbenzene	ND	ug/l	0.50				
1,2,3-Trichlorobenzene	ND	ug/l	2.5				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0309656

Continued

PARAMETER	RESULT	UNITS	RDL	REP	METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 13-15 (WG152003-6)								
Volatile Organics by GC/MS 8260 continued				1	8260B		0930 09:43	RY
1,2,4-Trichlorobenzene	ND	ug/l	2.5					
1,3,5-Trimethylbenzene	ND	ug/l	2.5					
1,2,4-Trimethylbenzene	ND	ug/l	2.5					
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5					
Ethyl ether	ND	ug/l	2.5					
Surrogate(s)	Recovery		QC Criteria					
1,2-Dichloroethane-d4	109.	%						
Toluene-d8	99.0	%						
4-Bromofluorobenzene	109.	%						
Dibromofluoromethane	106.	%						
Blank Analysis for sample(s) 16-19 (WG152003-8)								
Volatile Organics by GC/MS 8260				1	8260B		0930 17:23	RY
Methylene chloride	ND	ug/l	5.0					
1,1-Dichloroethane	ND	ug/l	0.75					
Chloroform	ND	ug/l	0.75					
Carbon tetrachloride	ND	ug/l	0.50					
1,2-Dichloropropane	ND	ug/l	1.8					
Dibromochloromethane	ND	ug/l	0.50					
1,1,2-Trichloroethane	ND	ug/l	0.75					
Tetrachloroethene	ND	ug/l	0.50					
Chlorobenzene	ND	ug/l	0.50					
Trichlorofluoromethane	ND	ug/l	2.5					
1,2-Dichloroethane	ND	ug/l	0.50					
1,1,1-Trichloroethane	ND	ug/l	0.50					
Bromodichloromethane	ND	ug/l	0.50					
trans-1,3-Dichloropropene	ND	ug/l	0.50					
cis-1,3-Dichloropropene	ND	ug/l	0.50					
1,1-Dichloropropene	ND	ug/l	2.5					
Bromoform	ND	ug/l	2.0					
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50					
Benzene	ND	ug/l	0.50					
Toluene	ND	ug/l	0.75					
Ethylbenzene	ND	ug/l	0.50					
Chloromethane	ND	ug/l	2.5					
Bromomethane	ND	ug/l	1.0					
Vinyl chloride	ND	ug/l	1.0					
Chloroethane	ND	ug/l	1.0					
1,1-Dichloroethene	ND	ug/l	0.50					
trans-1,2-Dichloroethene	ND	ug/l	0.75					
Trichloroethene	ND	ug/l	0.50					
1,2-Dichlorobenzene	ND	ug/l	2.5					
1,3-Dichlorobenzene	ND	ug/l	2.5					
1,4-Dichlorobenzene	ND	ug/l	2.5					
Methyl tert butyl ether	ND	ug/l	1.0					
p/m-Xylene	ND	ug/l	0.50					

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0309656

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PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 16-19 (WG152003-8)							
Volatile Organics by GC/MS 8260 continued				1 8260B		0930 17:23	RY
o-Xylene	ND	ug/l	0.50				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,4-Dichlorobutane	ND	ug/l	5.0				
Iodomethane	ND	ug/l	5.0				
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
Vinyl acetate	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				
Ethyl methacrylate	ND	ug/l	5.0				
Acrolein	ND	ug/l	12.				
Acrylonitrile	ND	ug/l	5.0				
Bromochloromethane	ND	ug/l	2.5				
Tetrahydrofuran	ND	ug/l	10.				
2,2-Dichloropropane	ND	ug/l	2.5				
1,2-Dibromoethane	ND	ug/l	2.5				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
Bromobenzene	ND	ug/l	2.5				
n-Butylbenzene	ND	ug/l	0.50				
sec-Butylbenzene	ND	ug/l	0.50				
tert-Butylbenzene	ND	ug/l	2.5				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	2.5				
Isopropylbenzene	ND	ug/l	0.50				
p-Isopropyltoluene	ND	ug/l	0.50				
Naphthalene	ND	ug/l	2.5				
n-Propylbenzene	ND	ug/l	0.50				
1,2,3-Trichlorobenzene	ND	ug/l	2.5				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
1,3,5-Trimethylbenzene	ND	ug/l	2.5				
1,2,4-Trimethylbenzene	ND	ug/l	2.5				
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5				
Ethyl ether	ND	ug/l	2.5				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	107.	%	
Toluene-d8	100.	%	
4-Bromofluorobenzene	112.	%	
Dibromofluoromethane	104.	%	

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0309656

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PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 21 (WG152238-8)							
Volatile Organics by GC/MS 8260				1 8260B		1002 10:51	RY
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
1,1-Dichloropropene	ND	ug/l	2.5				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Benzene	ND	ug/l	0.50				
Toluene	ND	ug/l	0.75				
Ethylbenzene	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
p/m-Xylene	ND	ug/l	0.50				
o-Xylene	ND	ug/l	0.50				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,4-Dichlorobutane	ND	ug/l	5.0				
Iodomethane	ND	ug/l	5.0				
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
Vinyl acetate	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0309656

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PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 21 (WG152238-8)							
Volatile Organics by GC/MS 8260 continued				1 8260B		1002 10:51 RY	
Ethyl methacrylate	ND	ug/l	5.0				
Acrolein	ND	ug/l	12.				
Acrylonitrile	ND	ug/l	5.0				
Bromochloromethane	ND	ug/l	2.5				
Tetrahydrofuran	ND	ug/l	10.				
2,2-Dichloropropane	ND	ug/l	2.5				
1,2-Dibromoethane	ND	ug/l	2.5				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
Bromobenzene	ND	ug/l	2.5				
n-Butylbenzene	ND	ug/l	0.50				
sec-Butylbenzene	ND	ug/l	0.50				
tert-Butylbenzene	ND	ug/l	2.5				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	2.5				
Isopropylbenzene	ND	ug/l	0.50				
p-Isopropyltoluene	ND	ug/l	0.50				
Naphthalene	ND	ug/l	2.5				
n-Propylbenzene	ND	ug/l	0.50				
1,2,3-Trichlorobenzene	ND	ug/l	2.5				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
1,3,5-Trimethylbenzene	ND	ug/l	2.5				
1,2,4-Trimethylbenzene	ND	ug/l	2.5				
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5				
Ethyl ether	ND	ug/l	2.5				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	102.	%					
Toluene-d8	100.	%					
4-Bromofluorobenzene	103.	%					
Dibromofluoromethane	100.	%					
Blank Analysis for sample(s) 01,05,08,12 (WG151976-5)							
Volatile Organics 8260 via Low 5035				1 8260B		0929 19:04 BT	
Methylene chloride	ND	ug/kg	10.				
1,1-Dichloroethane	ND	ug/kg	1.5				
Chloroform	ND	ug/kg	1.5				
Carbon tetrachloride	ND	ug/kg	1.0				
1,2-Dichloropropane	ND	ug/kg	3.5				
Dibromochloromethane	ND	ug/kg	1.0				
1,1,2-Trichloroethane	ND	ug/kg	1.5				
Tetrachloroethene	ND	ug/kg	1.0				
Chlorobenzene	ND	ug/kg	1.0				
Trichlorofluoromethane	ND	ug/kg	5.0				
1,2-Dichloroethane	ND	ug/kg	1.0				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

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PARAMETER	RESULT	UNITS	RDL	REP METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01,05,08,12 (WG151976-5)							
Volatile Organics 8260 via Low 5035 continued				1 8260B		0929 19:04	BT
1,1,1-Trichloroethane	ND	ug/kg	1.0				
Bromodichloromethane	ND	ug/kg	1.0				
trans-1,3-Dichloropropene	ND	ug/kg	1.0				
cis-1,3-Dichloropropene	ND	ug/kg	1.0				
1,1-Dichloropropene	ND	ug/kg	5.0				
Bromoform	ND	ug/kg	4.0				
1,1,2,2-Tetrachloroethane	ND	ug/kg	1.0				
Benzene	ND	ug/kg	1.0				
Toluene	ND	ug/kg	1.5				
Ethylbenzene	ND	ug/kg	1.0				
Chloromethane	ND	ug/kg	5.0				
Bromomethane	ND	ug/kg	2.0				
Vinyl chloride	ND	ug/kg	2.0				
Chloroethane	ND	ug/kg	2.0				
1,1-Dichloroethene	ND	ug/kg	1.0				
trans-1,2-Dichloroethene	ND	ug/kg	1.5				
Trichloroethene	ND	ug/kg	1.0				
1,2-Dichlorobenzene	ND	ug/kg	5.0				
1,3-Dichlorobenzene	ND	ug/kg	5.0				
1,4-Dichlorobenzene	ND	ug/kg	5.0				
Methyl tert butyl ether	ND	ug/kg	2.0				
p/m-Xylene	ND	ug/kg	1.0				
o-Xylene	ND	ug/kg	1.0				
cis-1,2-Dichloroethene	ND	ug/kg	1.0				
Dibromomethane	ND	ug/kg	10.				
1,4-Dichlorobutane	ND	ug/kg	10.				
Iodomethane	ND	ug/kg	10.				
1,2,3-Trichloropropane	ND	ug/kg	10.				
Styrene	ND	ug/kg	1.0				
Dichlorodifluoromethane	ND	ug/kg	10.				
Acetone	ND	ug/kg	10.				
Carbon disulfide	ND	ug/kg	10.				
2-Butanone	ND	ug/kg	10.				
Vinyl acetate	ND	ug/kg	10.				
4-Methyl-2-pentanone	ND	ug/kg	10.				
2-Hexanone	ND	ug/kg	10.				
Ethyl methacrylate	ND	ug/kg	10.				
Acrolein	ND	ug/kg	25.				
Acrylonitrile	ND	ug/kg	10.				
Bromochloromethane	ND	ug/kg	5.0				
Tetrahydrofuran	ND	ug/kg	20.				
2,2-Dichloropropane	ND	ug/kg	5.0				
1,2-Dibromoethane	ND	ug/kg	5.0				
1,3-Dichloropropane	ND	ug/kg	5.0				
1,1,1,2-Tetrachloroethane	ND	ug/kg	1.0				
Bromobenzene	ND	ug/kg	5.0				
n-Butylbenzene	ND	ug/kg	1.0				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

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PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01,05,08,12 (WG151976-5)							
Volatile Organics 8260 via Low 5035 continued				1 8260B		0929 19:04	BT
sec-Butylbenzene	ND	ug/kg	1.0				
tert-Butylbenzene	ND	ug/kg	5.0				
o-Chlorotoluene	ND	ug/kg	5.0				
p-Chlorotoluene	ND	ug/kg	5.0				
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.0				
Hexachlorobutadiene	ND	ug/kg	5.0				
Isopropylbenzene	ND	ug/kg	1.0				
p-Isopropyltoluene	ND	ug/kg	1.0				
Naphthalene	ND	ug/kg	5.0				
n-Propylbenzene	ND	ug/kg	1.0				
1,2,3-Trichlorobenzene	ND	ug/kg	5.0				
1,2,4-Trichlorobenzene	ND	ug/kg	5.0				
1,3,5-Trimethylbenzene	ND	ug/kg	5.0				
1,2,4-Trimethylbenzene	ND	ug/kg	5.0				
trans-1,4-Dichloro-2-butene	ND	ug/kg	5.0				
Ethyl ether	ND	ug/kg	5.0				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	112.	%					
Toluene-d8	116.	%					
4-Bromofluorobenzene	113.	%					
Dibromofluoromethane	104.	%					

Blank Analysis for sample(s) 10 (WG151976-7)

Volatile Organics 8260 via Low 5035				1 8260B		1001 16:34	BT
Methylene chloride	ND	ug/kg	10.				
1,1-Dichloroethane	ND	ug/kg	1.5				
Chloroform	ND	ug/kg	1.5				
Carbon tetrachloride	ND	ug/kg	1.0				
1,2-Dichloropropane	ND	ug/kg	3.5				
Dibromochloromethane	ND	ug/kg	1.0				
1,1,2-Trichloroethane	ND	ug/kg	1.5				
Tetrachloroethene	ND	ug/kg	1.0				
Chlorobenzene	ND	ug/kg	1.0				
Trichlorofluoromethane	ND	ug/kg	5.0				
1,2-Dichloroethane	ND	ug/kg	1.0				
1,1,1-Trichloroethane	ND	ug/kg	1.0				
Bromodichloromethane	ND	ug/kg	1.0				
trans-1,3-Dichloropropene	ND	ug/kg	1.0				
cis-1,3-Dichloropropene	ND	ug/kg	1.0				
1,1-Dichloropropene	ND	ug/kg	5.0				
Bromoform	ND	ug/kg	4.0				
1,1,2,2-Tetrachloroethane	ND	ug/kg	1.0				
Benzene	ND	ug/kg	1.0				
Toluene	ND	ug/kg	1.5				
Ethylbenzene	ND	ug/kg	1.0				
Chloromethane	ND	ug/kg	5.0				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

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PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 10 (WG151976-7)							
Volatile Organics 8260 via Low 5035 continued				1 8260B		1001 16:34	BT
Bromomethane	ND	ug/kg	2.0				
Vinyl chloride	ND	ug/kg	2.0				
Chloroethane	ND	ug/kg	2.0				
1,1-Dichloroethene	ND	ug/kg	1.0				
trans-1,2-Dichloroethene	ND	ug/kg	1.5				
Trichloroethene	ND	ug/kg	1.0				
1,2-Dichlorobenzene	ND	ug/kg	5.0				
1,3-Dichlorobenzene	ND	ug/kg	5.0				
1,4-Dichlorobenzene	ND	ug/kg	5.0				
Methyl tert butyl ether	ND	ug/kg	2.0				
p/m-Xylene	ND	ug/kg	1.0				
o-Xylene	ND	ug/kg	1.0				
cis-1,2-Dichloroethene	ND	ug/kg	1.0				
Dibromomethane	ND	ug/kg	10.				
1,4-Dichlorobutane	ND	ug/kg	10.				
Iodomethane	ND	ug/kg	10.				
1,2,3-Trichloropropane	ND	ug/kg	10.				
Styrene	ND	ug/kg	1.0				
Dichlorodifluoromethane	ND	ug/kg	10.				
Acetone	ND	ug/kg	10.				
Carbon disulfide	ND	ug/kg	10.				
2-Butanone	ND	ug/kg	10.				
Vinyl acetate	ND	ug/kg	10.				
4-Methyl-2-pentanone	ND	ug/kg	10.				
2-Hexanone	ND	ug/kg	10.				
Ethyl methacrylate	ND	ug/kg	10.				
Acrolein	ND	ug/kg	25.				
Acrylonitrile	ND	ug/kg	10.				
Bromochloromethane	ND	ug/kg	5.0				
Tetrahydrofuran	ND	ug/kg	20.				
2,2-Dichloropropane	ND	ug/kg	5.0				
1,2-Dibromoethane	ND	ug/kg	5.0				
1,3-Dichloropropane	ND	ug/kg	5.0				
1,1,1,2-Tetrachloroethane	ND	ug/kg	1.0				
Bromobenzene	ND	ug/kg	5.0				
n-Butylbenzene	ND	ug/kg	1.0				
sec-Butylbenzene	ND	ug/kg	1.0				
tert-Butylbenzene	ND	ug/kg	5.0				
o-Chlorotoluene	ND	ug/kg	5.0				
p-Chlorotoluene	ND	ug/kg	5.0				
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.0				
Hexachlorobutadiene	ND	ug/kg	5.0				
Isopropylbenzene	ND	ug/kg	1.0				
p-Isopropyltoluene	ND	ug/kg	1.0				
Naphthalene	ND	ug/kg	5.0				
n-Propylbenzene	ND	ug/kg	1.0				
1,2,3-Trichlorobenzene	ND	ug/kg	5.0				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

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PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 10 (WG151976-7)							
Volatile Organics 8260 via Low 5035 continued				1 8260B		1001 16:34	BT
1,2,4-Trichlorobenzene	ND	ug/kg	5.0				
1,3,5-Trimethylbenzene	ND	ug/kg	5.0				
1,2,4-Trimethylbenzene	ND	ug/kg	5.0				
trans-1,4-Dichloro-2-butene	ND	ug/kg	5.0				
Ethyl ether	ND	ug/kg	5.0				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	102.	%					
Toluene-d8	114.	%					
4-Bromofluorobenzene	102.	%					
Dibromofluoromethane	98.0	%					
Blank Analysis for sample(s) 03,07,09 (WG151918-8)							
Volatile Organics 8260 via High 5035				1 8260B		0930 17:02	BT
Methylene chloride	ND	ug/kg	500				
1,1-Dichloroethane	ND	ug/kg	75.				
Chloroform	ND	ug/kg	75.				
Carbon tetrachloride	ND	ug/kg	50.				
1,2-Dichloropropane	ND	ug/kg	180				
Dibromochloromethane	ND	ug/kg	50.				
1,1,2-Trichloroethane	ND	ug/kg	75.				
Tetrachloroethene	ND	ug/kg	50.				
Chlorobenzene	ND	ug/kg	50.				
Trichlorofluoromethane	ND	ug/kg	250				
1,2-Dichloroethane	ND	ug/kg	50.				
1,1,1-Trichloroethane	ND	ug/kg	50.				
Bromodichloromethane	ND	ug/kg	50.				
trans-1,3-Dichloropropene	ND	ug/kg	50.				
cis-1,3-Dichloropropene	ND	ug/kg	50.				
1,1-Dichloropropene	ND	ug/kg	250				
Bromoform	ND	ug/kg	200				
1,1,2,2-Tetrachloroethane	ND	ug/kg	50.				
Benzene	ND	ug/kg	50.				
Toluene	ND	ug/kg	75.				
Ethylbenzene	ND	ug/kg	50.				
Chloromethane	ND	ug/kg	250				
Bromomethane	ND	ug/kg	100				
Vinyl chloride	ND	ug/kg	100				
Chloroethane	ND	ug/kg	100				
1,1-Dichloroethene	ND	ug/kg	50.				
trans-1,2-Dichloroethene	ND	ug/kg	75.				
Trichloroethene	ND	ug/kg	50.				
1,2-Dichlorobenzene	ND	ug/kg	250				
1,3-Dichlorobenzene	ND	ug/kg	250				
1,4-Dichlorobenzene	ND	ug/kg	250				
Methyl tert butyl ether	ND	ug/kg	100				
p/m-Xylene	ND	ug/kg	50.				

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QUALITY ASSURANCE BATCH BLANK ANALYSIS

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PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 03,07,09 (WG151918-8)							
Volatile Organics 8260 via High 5035 continued				1 8260B		0930 17:02	BT
o-Xylene	ND	ug/kg	50.				
cis-1,2-Dichloroethene	ND	ug/kg	50.				
Dibromomethane	ND	ug/kg	500				
1,4-Dichlorobutane	ND	ug/kg	500				
Iodomethane	ND	ug/kg	500				
1,2,3-Trichloropropane	ND	ug/kg	500				
Styrene	ND	ug/kg	50.				
Dichlorodifluoromethane	ND	ug/kg	500				
Acetone	ND	ug/kg	500				
Carbon disulfide	ND	ug/kg	500				
2-Butanone	ND	ug/kg	500				
Vinyl acetate	ND	ug/kg	500				
4-Methyl-2-pentanone	ND	ug/kg	500				
2-Hexanone	ND	ug/kg	500				
Ethyl methacrylate	ND	ug/kg	500				
Acrolein	ND	ug/kg	1200				
Acrylonitrile	ND	ug/kg	500				
Bromochloromethane	ND	ug/kg	250				
Tetrahydrofuran	ND	ug/kg	1000				
2,2-Dichloropropane	ND	ug/kg	250				
1,2-Dibromoethane	ND	ug/kg	250				
1,3-Dichloropropane	ND	ug/kg	250				
1,1,1,2-Tetrachloroethane	ND	ug/kg	50.				
Bromobenzene	ND	ug/kg	250				
n-Butylbenzene	ND	ug/kg	50.				
sec-Butylbenzene	ND	ug/kg	50.				
tert-Butylbenzene	ND	ug/kg	250				
o-Chlorotoluene	ND	ug/kg	250				
p-Chlorotoluene	ND	ug/kg	250				
1,2-Dibromo-3-chloropropane	ND	ug/kg	250				
Hexachlorobutadiene	ND	ug/kg	250				
Isopropylbenzene	ND	ug/kg	50.				
p-Isopropyltoluene	ND	ug/kg	50.				
Naphthalene	ND	ug/kg	250				
n-Propylbenzene	ND	ug/kg	50.				
1,2,3-Trichlorobenzene	ND	ug/kg	250				
1,2,4-Trichlorobenzene	ND	ug/kg	250				
1,3,5-Trimethylbenzene	ND	ug/kg	250				
1,2,4-Trimethylbenzene	ND	ug/kg	250				
trans-1,4-Dichloro-2-butene	ND	ug/kg	250				
Ethyl ether	ND	ug/kg	250				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	98.0	%	
Toluene-d8	116.	%	
4-Bromofluorobenzene	106.	%	
Dibromofluoromethane	92.0	%	

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0309656

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01,03,05,07-08,10-11 (WG151842-4)							
Volatile Petroleum Hydrocarbons				47 98-1		1001 12:33	MM
C5-C8 Aliphatics, Unadjusted	ND	mg/kg	2.00				
C9-C12 Aliphatics, Unadjusted	ND	mg/kg	2.00				
C9-C10 Aromatics	ND	mg/kg	2.00				
C5-C8 Aliphatics, Adjusted	ND	mg/kg	2.00				
C9-C12 Aliphatics, Adjusted	ND	mg/kg	2.00				
Benzene	ND	mg/kg	0.100				
Toluene	ND	mg/kg	0.100				
Ethylbenzene	ND	mg/kg	0.100				
p/m-Xylene	ND	mg/kg	0.100				
o-Xylene	ND	mg/kg	0.100				
Methyl tert butyl ether	ND	mg/kg	0.200				
Naphthalene	ND	mg/kg	1.00				
Surrogate(s)	Recovery		QC Criteria				
2,5-Dibromotoluene-PID	117.	%	70-130				
2,5-Dibromotoluene-FID	115.	%	70-130				
Blank Analysis for sample(s) 13-20,24 (WG152128-4)							
Volatile Petroleum Hydrocarbons				47 98-1		1001 09:02	MM
C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0				
C9-C12 Aliphatics, Unadjusted	ND	ug/l	40.0				
C9-C10 Aromatics	ND	ug/l	40.0				
C5-C8 Aliphatics, Adjusted	ND	ug/l	40.0				
C9-C12 Aliphatics, Adjusted	ND	ug/l	40.0				
Benzene	ND	ug/l	2.00				
Toluene	ND	ug/l	2.00				
Ethylbenzene	ND	ug/l	2.00				
p/m-Xylene	ND	ug/l	2.00				
o-Xylene	ND	ug/l	2.00				
Methyl tert butyl ether	ND	ug/l	4.00				
Naphthalene	ND	ug/l	20.0				
Surrogate(s)	Recovery		QC Criteria				
2,5-Dibromotoluene-PID	99.0	%	70-130				
2,5-Dibromotoluene-FID	103.	%	70-130				
Blank Analysis for sample(s) 09 (WG152220-4)							
Volatile Petroleum Hydrocarbons				47 98-1		1002 08:51	MM
C5-C8 Aliphatics, Unadjusted	ND	mg/kg	2.00				
C9-C12 Aliphatics, Unadjusted	ND	mg/kg	2.00				
C9-C10 Aromatics	ND	mg/kg	2.00				
C5-C8 Aliphatics, Adjusted	ND	mg/kg	2.00				
C9-C12 Aliphatics, Adjusted	ND	mg/kg	2.00				
Benzene	ND	mg/kg	0.100				
Toluene	ND	mg/kg	0.100				
Ethylbenzene	ND	mg/kg	0.100				
p/m-Xylene	ND	mg/kg	0.100				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0309656

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 09 (WG152220-4)							
Volatile Petroleum Hydrocarbons continued				47 98-1		1002 08:51	MH
o-Xylene	ND	mg/kg	0.100				
Methyl tert butyl ether	ND	mg/kg	0.200				
Naphthalene	ND	mg/kg	1.00				
Surrogate(s)	Recovery		QC Criteria				
2,5-Dibromotoluene-PID	91.0	%	70-130				
2,5-Dibromotoluene-FID	108.	%	70-130				
Blank Analysis for sample(s) 21-22 (WG152226-3)							
Volatile Petroleum Hydrocarbons				47 98-1		1001 09:02	MH
C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0				
C9-C12 Aliphatics, Unadjusted	ND	ug/l	40.0				
C9-C10 Aromatics	ND	ug/l	40.0				
C5-C8 Aliphatics, Adjusted	ND	ug/l	40.0				
C9-C12 Aliphatics, Adjusted	ND	ug/l	40.0				
Benzene	ND	ug/l	2.00				
Toluene	ND	ug/l	2.00				
Ethylbenzene	ND	ug/l	2.00				
p/m-Xylene	ND	ug/l	2.00				
o-Xylene	ND	ug/l	2.00				
Methyl tert butyl ether	ND	ug/l	4.00				
Naphthalene	ND	ug/l	20.0				
Surrogate(s)	Recovery		QC Criteria				
2,5-Dibromotoluene-PID	99.0	%	70-130				
2,5-Dibromotoluene-FID	103.	%	70-130				
Blank Analysis for sample(s) 23 (WG152226-4)							
Volatile Petroleum Hydrocarbons				47 98-1		1002 08:51	MH
C5-C8 Aliphatics, Unadjusted	ND	ug/l	40.0				
C9-C12 Aliphatics, Unadjusted	ND	ug/l	40.0				
C9-C10 Aromatics	ND	ug/l	40.0				
C5-C8 Aliphatics, Adjusted	ND	ug/l	40.0				
C9-C12 Aliphatics, Adjusted	ND	ug/l	40.0				
Benzene	ND	ug/l	2.00				
Toluene	ND	ug/l	2.00				
Ethylbenzene	ND	ug/l	2.00				
p/m-Xylene	ND	ug/l	2.00				
o-Xylene	ND	ug/l	2.00				
Methyl tert butyl ether	ND	ug/l	4.00				
Naphthalene	ND	ug/l	20.0				
Surrogate(s)	Recovery		QC Criteria				
2,5-Dibromotoluene-PID	97.0	%	70-130				
2,5-Dibromotoluene-FID	100.	%	70-130				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0309656

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01,03,05,07-10 (WG151709-1)							
Extractable Petroleum Hydrocarbons				46 98-1	0926 10:45	0930 01:45	BW
C9-C18 Aliphatics	ND	mg/kg	10.0				
C19-C36 Aliphatics	ND	mg/kg	10.0				
C11-C22 Aromatics, Unadjusted	ND	mg/kg	10.0				
C11-C22 Aromatics, Adjusted	ND	mg/kg	10.0				
Naphthalene	ND	mg/kg	0.500				
2-Methylnaphthalene	ND	mg/kg	0.500				
Acenaphthylene	ND	mg/kg	0.500				
Acenaphthene	ND	mg/kg	0.500				
Fluorene	ND	mg/kg	0.500				
Phenanthrene	ND	mg/kg	0.500				
Anthracene	ND	mg/kg	0.500				
Fluoranthene	ND	mg/kg	0.500				
Pyrene	ND	mg/kg	0.500				
Benzo(a)anthracene	ND	mg/kg	0.500				
Chrysene	ND	mg/kg	0.500				
Benzo(b)fluoranthene	ND	mg/kg	0.500				
Benzo(k)fluoranthene	ND	mg/kg	0.500				
Benzo(a)pyrene	ND	mg/kg	0.500				
Indeno(1,2,3-cd)Pyrene	ND	mg/kg	0.500				
Dibenzo(a,h)anthracene	ND	mg/kg	0.500				
Benzo(g,h,i)perylene	ND	mg/kg	0.500				

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	58.0	%	40-140
o-Terphenyl	65.0	%	40-140
2-Fluorobiphenyl	68.0	%	40-140
2-Bromonaphthalene	71.0	%	40-140

Blank Analysis for sample(s) 15,17-19 (WG152328-1)							
Extractable Petroleum Hydrocarbons				46 98-1	1001 14:15	1002 15:14	BJ
C9-C18 Aliphatics	ND	ug/l	100.				
C19-C36 Aliphatics	ND	ug/l	100.				
C11-C22 Aromatics, Unadjusted	ND	ug/l	100.				
C11-C22 Aromatics, Adjusted	ND	ug/l	100.				
Naphthalene	ND	ug/l	20.0				
2-Methylnaphthalene	ND	ug/l	20.0				
Acenaphthylene	ND	ug/l	20.0				
Acenaphthene	ND	ug/l	20.0				
Fluorene	ND	ug/l	20.0				
Phenanthrene	ND	ug/l	20.0				
Anthracene	ND	ug/l	20.0				
Fluoranthene	ND	ug/l	20.0				
Pyrene	ND	ug/l	20.0				
Benzo(a)anthracene	ND	ug/l	20.0				
Chrysene	ND	ug/l	20.0				
Benzo(b)fluoranthene	ND	ug/l	20.0				
Benzo(k)fluoranthene	ND	ug/l	20.0				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0309656

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 15,17-19 (WG152328-1)							
Extractable Petroleum Hydrocarbons continued				46 98-1	1001 14:15	1002 15:14	BJ
Benzo(a)pyrene	ND	ug/l	20.0				
Indeno(1,2,3-cd)Pyrene	ND	ug/l	20.0				
Dibenzo(a,h)anthracene	ND	ug/l	20.0				
Benzo(g,h,i)perylene	ND	ug/l	20.0				
Surrogate(s)	Recovery		QC Criteria				
Chloro-Octadecane	55.0	%	40-140				
o-Terphenyl	63.0	%	40-140				
2-Fluorobiphenyl	69.0	%	40-140				
2-Bromonaphthalene	74.0	%	40-140				
Blank Analysis for sample(s) 13-14,16,20-23 (WG152327-1)							
Extractable Petroleum Hydrocarbons				46 98-1	1001 16:40	1002 17:47	BJ
C9-C18 Aliphatics	ND	ug/l	100.				
C19-C36 Aliphatics	ND	ug/l	100.				
C11-C22 Aromatics, Unadjusted	ND	ug/l	100.				
C11-C22 Aromatics, Adjusted	ND	ug/l	100.				
Naphthalene	ND	ug/l	20.0				
2-Methylnaphthalene	ND	ug/l	20.0				
Acenaphthylene	ND	ug/l	20.0				
Acenaphthene	ND	ug/l	20.0				
Fluorene	ND	ug/l	20.0				
Phenanthrene	ND	ug/l	20.0				
Anthracene	ND	ug/l	20.0				
Fluoranthene	ND	ug/l	20.0				
Pyrene	ND	ug/l	20.0				
Benzo(a)anthracene	ND	ug/l	20.0				
Chrysene	ND	ug/l	20.0				
Benzo(b)fluoranthene	ND	ug/l	20.0				
Benzo(k)fluoranthene	ND	ug/l	20.0				
Benzo(a)pyrene	ND	ug/l	20.0				
Indeno(1,2,3-cd)Pyrene	ND	ug/l	20.0				
Dibenzo(a,h)anthracene	ND	ug/l	20.0				
Benzo(g,h,i)perylene	ND	ug/l	20.0				
Surrogate(s)	Recovery		QC Criteria				
Chloro-Octadecane	58.0	%	40-140				
o-Terphenyl	76.0	%	40-140				
2-Fluorobiphenyl	81.0	%	40-140				
2-Bromonaphthalene	79.0	%	40-140				

REFERENCES

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

30. Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

46. Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), Massachusetts Department of Environmental Protection, (MADEP-EPH-98-1), January 1998.

47. Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), Massachusetts Department of Environmental Protection, (MADEP-VPH-98-1), January 1998.

GLOSSARY OF TERMS AND SYMBOLS

REF Reference number in which test method may be found.
METHOD Method number by which analysis was performed.
ID Initials of the analyst.
ND Not detected in comparison to the reported detection limit.

Please note that all solid samples are reported on dry weight basis unless noted otherwise.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL

ANALYTICAL REPORT

Lab Number:	L0907709
Client:	Sanborn, Head & Associates, Inc. 1 Technology Park Drive Westford, MA 01886
ATTN:	Duncan Wood
Project Name:	515 SOMERVILLE AVE.
Project Number:	2315.03
Report Date:	06/18/09

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L0907709-01	SE GAS TANK1 SWALL	SOMERVILLE, MA	06/10/09 14:28
L0907709-02	SE GAS TANK1 BASE	SOMERVILLE, MA	06/10/09 14:43
L0907709-03	SE GAS TANK1 EWALL	SOMERVILLE, MA	06/10/09 14:25
L0907709-04	SE GAS TANK1 WWALL	SOMERVILLE, MA	06/10/09 14:36
L0907709-05	SE GAS TANK1 NWALL	SOMERVILLE, MA	06/10/09 14:40
L0907709-06	SW GAS TANK2 SWALL	SOMERVILLE, MA	06/10/09 15:30
L0907709-07	SW GAS TANK2 BASE	SOMERVILLE, MA	06/10/09 15:10
L0907709-08	SW GAS TANK2 NWALL	SOMERVILLE, MA	06/10/09 15:20
L0907709-09	SW GAS TANK2 EWALL	SOMERVILLE, MA	06/10/09 15:15
L0907709-10	SW GAS TANK2 WWALL	SOMERVILLE, MA	06/10/09 15:35
L0907709-11	WEST GT BASE	SOMERVILLE, MA	06/10/09 13:04

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03
Lab Number: L0907709
Report Date: 06/18/09

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	YES
A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	NO
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	YES

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

MCP Related Narratives

VPH

L0907709-01 through -10 fell short of the recommended 1:1 methanol:soil ratio, due to insufficient soil in the sample vials.

L0907709-06 has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

EPH

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

Case Narrative (continued)

In reference to question E:

The WG366739-2/-3 LCS/LCSD RPD associated with L0907709-01 through -11 is above the acceptance criteria for Nonane (C9)(27%); however, the individual LCS/LCSD recoveries are within method limits. The results of the associated samples are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Title: Technical Director/Representative

Date: 06/18/09

ORGANICS

PETROLEUM HYDROCARBONS

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03
Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID:	L0907709-01	Date Collected:	06/10/09 14:28
Client ID:	SE GAS TANK1 SWALL	Date Received:	06/11/09
Sample Location:	SOMERVILLE, MA	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	59,VPH-04-1.1		
Analytical Date:	06/12/09 16:52		
Analyst:	RC		
Percent Solids:	82%		

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	2.3:1

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab					
C5-C8 Aliphatics	ND		mg/kg	8.05	1
C9-C12 Aliphatics	ND		mg/kg	8.05	1
C9-C10 Aromatics	ND		mg/kg	8.05	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	8.05	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	8.05	1
Benzene	ND		mg/kg	0.322	1
Toluene	ND		mg/kg	0.322	1
Ethylbenzene	ND		mg/kg	0.322	1
p/m-Xylene	ND		mg/kg	0.322	1
o-Xylene	ND		mg/kg	0.322	1
Methyl tert butyl ether	ND		mg/kg	0.161	1
Naphthalene	ND		mg/kg	1.61	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	85		70-130
2,5-Dibromotoluene-FID	88		70-130

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03
Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID:	L0907709-01	Date Collected:	06/10/09 14:28
Client ID:	SE GAS TANK1 SWALL	Date Received:	06/11/09
Sample Location:	SOMERVILLE, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3540C
Analytical Method:	61,EPH-04-1	Extraction Date:	06/13/09 12:25
Analytical Date:	06/17/09 23:47	Cleanup Method1:	EPH-04-1
Analyst:	AS	Cleanup Date1:	06/17/09
Percent Solids:	82%		

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab					
C9-C18 Aliphatics	ND		mg/kg	8.13	1
C19-C36 Aliphatics	12.9		mg/kg	8.13	1
C11-C22 Aromatics	22.6		mg/kg	8.13	1
C11-C22 Aromatics, Adjusted	21.0		mg/kg	8.13	1
Naphthalene	ND		mg/kg	0.406	1
2-Methylnaphthalene	ND		mg/kg	0.406	1
Acenaphthylene	ND		mg/kg	0.406	1
Acenaphthene	ND		mg/kg	0.406	1
Fluorene	ND		mg/kg	0.406	1
Phenanthrene	ND		mg/kg	0.406	1
Anthracene	ND		mg/kg	0.406	1
Fluoranthene	0.422		mg/kg	0.406	1
Pyrene	ND		mg/kg	0.406	1
Benzo(a)anthracene	ND		mg/kg	0.406	1
Chrysene	ND		mg/kg	0.406	1
Benzo(b)fluoranthene	ND		mg/kg	0.406	1
Benzo(k)fluoranthene	ND		mg/kg	0.406	1
Benzo(a)pyrene	ND		mg/kg	0.406	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.406	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.406	1
Benzo(ghi)perylene	1.20		mg/kg	0.406	1

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-01
Client ID: SE GAS TANK1 SWALL
Sample Location: SOMERVILLE, MA

Date Collected: 06/10/09 14:28
Date Received: 06/11/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	58		40-140
o-Terphenyl	85		40-140
2-Fluorobiphenyl	77		40-140
2-Bromonaphthalene	80		40-140

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID:	L0907709-02	Date Collected:	06/10/09 14:43
Client ID:	SE GAS TANK1 BASE	Date Received:	06/11/09
Sample Location:	SOMERVILLE, MA	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	59,VPH-04-1.1		
Analytical Date:	06/12/09 17:43		
Analyst:	RC		
Percent Solids:	82%		

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1.4:1

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab					
C5-C8 Aliphatics	ND		mg/kg	5.24	1
C9-C12 Aliphatics	ND		mg/kg	5.24	1
C9-C10 Aromatics	ND		mg/kg	5.24	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	5.24	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	5.24	1
Benzene	ND		mg/kg	0.210	1
Toluene	ND		mg/kg	0.210	1
Ethylbenzene	ND		mg/kg	0.210	1
p/m-Xylene	ND		mg/kg	0.210	1
o-Xylene	ND		mg/kg	0.210	1
Methyl tert butyl ether	ND		mg/kg	0.105	1
Naphthalene	ND		mg/kg	1.05	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	83		70-130
2,5-Dibromotoluene-FID	86		70-130

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID:	L0907709-02	Date Collected:	06/10/09 14:43
Client ID:	SE GAS TANK1 BASE	Date Received:	06/11/09
Sample Location:	SOMERVILLE, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3540C
Analytical Method:	61,EPH-04-1	Extraction Date:	06/13/09 12:25
Analytical Date:	06/18/09 00:17	Cleanup Method1:	EPH-04-1
Analyst:	AS	Cleanup Date1:	06/17/09
Percent Solids:	82%		

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab					
C9-C18 Aliphatics	ND		mg/kg	8.13	1
C19-C36 Aliphatics	16.5		mg/kg	8.13	1
C11-C22 Aromatics	17.8		mg/kg	8.13	1
C11-C22 Aromatics, Adjusted	16.7		mg/kg	8.13	1
Naphthalene	ND		mg/kg	0.406	1
2-Methylnaphthalene	ND		mg/kg	0.406	1
Acenaphthylene	ND		mg/kg	0.406	1
Acenaphthene	ND		mg/kg	0.406	1
Fluorene	ND		mg/kg	0.406	1
Phenanthrene	ND		mg/kg	0.406	1
Anthracene	ND		mg/kg	0.406	1
Fluoranthene	ND		mg/kg	0.406	1
Pyrene	ND		mg/kg	0.406	1
Benzo(a)anthracene	ND		mg/kg	0.406	1
Chrysene	ND		mg/kg	0.406	1
Benzo(b)fluoranthene	ND		mg/kg	0.406	1
Benzo(k)fluoranthene	ND		mg/kg	0.406	1
Benzo(a)pyrene	ND		mg/kg	0.406	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.406	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.406	1
Benzo(ghi)perylene	1.01		mg/kg	0.406	1

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-02
Client ID: SE GAS TANK1 BASE
Sample Location: SOMERVILLE, MA

Date Collected: 06/10/09 14:43
Date Received: 06/11/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	70		40-140
o-Terphenyl	92		40-140
2-Fluorobiphenyl	88		40-140
2-Bromonaphthalene	90		40-140

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-03
Client ID: SE GAS TANK1 EWALL
Sample Location: SOMERVILLE, MA
Matrix: Soil
Analytical Method: 59,VPH-04-1.1
Analytical Date: 06/12/09 18:35
Analyst: RC
Percent Solids: 79%

Date Collected: 06/10/09 14:25
Date Received: 06/11/09
Field Prep: Not Specified

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1.5:1

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab					
C5-C8 Aliphatics	ND		mg/kg	5.73	1
C9-C12 Aliphatics	ND		mg/kg	5.73	1
C9-C10 Aromatics	ND		mg/kg	5.73	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	5.73	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	5.73	1
Benzene	ND		mg/kg	0.229	1
Toluene	ND		mg/kg	0.229	1
Ethylbenzene	ND		mg/kg	0.229	1
p/m-Xylene	ND		mg/kg	0.229	1
o-Xylene	ND		mg/kg	0.229	1
Methyl tert butyl ether	ND		mg/kg	0.114	1
Naphthalene	ND		mg/kg	1.14	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	88		70-130
2,5-Dibromotoluene-FID	91		70-130

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID:	L0907709-03
Client ID:	SE GAS TANK1 EWALL
Sample Location:	SOMERVILLE, MA
Matrix:	Soil
Analytical Method:	61,EPH-04-1
Analytical Date:	06/17/09 19:10
Analyst:	AS
Percent Solids:	79%

Date Collected:	06/10/09 14:25
Date Received:	06/11/09
Field Prep:	Not Specified
Extraction Method:	EPA 3540C
Extraction Date:	06/13/09 12:25
Cleanup Method1:	EPH-04-1
Cleanup Date1:	06/17/09

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab					
C9-C18 Aliphatics	ND		mg/kg	8.44	1
C19-C36 Aliphatics	15.0		mg/kg	8.44	1
C11-C22 Aromatics	19.3		mg/kg	8.44	1
C11-C22 Aromatics, Adjusted	18.5		mg/kg	8.44	1
Naphthalene	ND		mg/kg	0.422	1
2-Methylnaphthalene	ND		mg/kg	0.422	1
Acenaphthylene	ND		mg/kg	0.422	1
Acenaphthene	ND		mg/kg	0.422	1
Fluorene	ND		mg/kg	0.422	1
Phenanthrene	ND		mg/kg	0.422	1
Anthracene	ND		mg/kg	0.422	1
Fluoranthene	ND		mg/kg	0.422	1
Pyrene	ND		mg/kg	0.422	1
Benzo(a)anthracene	ND		mg/kg	0.422	1
Chrysene	ND		mg/kg	0.422	1
Benzo(b)fluoranthene	ND		mg/kg	0.422	1
Benzo(k)fluoranthene	ND		mg/kg	0.422	1
Benzo(a)pyrene	ND		mg/kg	0.422	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.422	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.422	1
Benzo(ghi)perylene	0.862		mg/kg	0.422	1

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-03
Client ID: SE GAS TANK1 EWALL
Sample Location: SOMERVILLE, MA

Date Collected: 06/10/09 14:25
Date Received: 06/11/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	74		40-140
o-Terphenyl	101		40-140
2-Fluorobiphenyl	99		40-140
2-Bromonaphthalene	100		40-140

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-04
Client ID: SE GAS TANK1 WWALL
Sample Location: SOMERVILLE, MA
Matrix: Soil
Analytical Method: 59,VPH-04-1.1
Analytical Date: 06/12/09 19:26
Analyst: RC
Percent Solids: 82%

Date Collected: 06/10/09 14:36
Date Received: 06/11/09
Field Prep: Not Specified

Quality Control Information

Condition of sample received: Satisfactory
Sample Temperature upon receipt: Received on Ice
Were samples received in methanol? Covering the Soil
Methanol ratio: 1.5:1

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab					
C5-C8 Aliphatics	ND		mg/kg	5.53	1
C9-C12 Aliphatics	ND		mg/kg	5.53	1
C9-C10 Aromatics	ND		mg/kg	5.53	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	5.53	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	5.53	1
Benzene	ND		mg/kg	0.221	1
Toluene	ND		mg/kg	0.221	1
Ethylbenzene	ND		mg/kg	0.221	1
p/m-Xylene	ND		mg/kg	0.221	1
o-Xylene	ND		mg/kg	0.221	1
Methyl tert butyl ether	ND		mg/kg	0.110	1
Naphthalene	ND		mg/kg	1.10	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	83		70-130
2,5-Dibromotoluene-FID	84		70-130

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID:	L0907709-04
Client ID:	SE GAS TANK1 WWALL
Sample Location:	SOMERVILLE, MA
Matrix:	Soil
Analytical Method:	61,EPH-04-1
Analytical Date:	06/17/09 17:07
Analyst:	AS
Percent Solids:	82%

Date Collected:	06/10/09 14:36
Date Received:	06/11/09
Field Prep:	Not Specified
Extraction Method:	EPA 3540C
Extraction Date:	06/13/09 12:25
Cleanup Method1:	EPH-04-1
Cleanup Date1:	06/17/09

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab					
C9-C18 Aliphatics	ND		mg/kg	8.13	1
C19-C36 Aliphatics	ND		mg/kg	8.13	1
C11-C22 Aromatics	ND		mg/kg	8.13	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	8.13	1
Naphthalene	ND		mg/kg	0.406	1
2-Methylnaphthalene	ND		mg/kg	0.406	1
Acenaphthylene	ND		mg/kg	0.406	1
Acenaphthene	ND		mg/kg	0.406	1
Fluorene	ND		mg/kg	0.406	1
Phenanthrene	ND		mg/kg	0.406	1
Anthracene	ND		mg/kg	0.406	1
Fluoranthene	ND		mg/kg	0.406	1
Pyrene	ND		mg/kg	0.406	1
Benzo(a)anthracene	ND		mg/kg	0.406	1
Chrysene	ND		mg/kg	0.406	1
Benzo(b)fluoranthene	ND		mg/kg	0.406	1
Benzo(k)fluoranthene	ND		mg/kg	0.406	1
Benzo(a)pyrene	ND		mg/kg	0.406	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.406	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.406	1
Benzo(ghi)perylene	0.889		mg/kg	0.406	1

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-04
Client ID: SE GAS TANK1 WWALL
Sample Location: SOMERVILLE, MA

Date Collected: 06/10/09 14:36
Date Received: 06/11/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	62		40-140
o-Terphenyl	87		40-140
2-Fluorobiphenyl	91		40-140
2-Bromonaphthalene	91		40-140

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID:	L0907709-05	Date Collected:	06/10/09 14:40
Client ID:	SE GAS TANK1 NWALL	Date Received:	06/11/09
Sample Location:	SOMERVILLE, MA	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	59,VPH-04-1.1		
Analytical Date:	06/12/09 20:18		
Analyst:	RC		
Percent Solids:	86%		

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1.5:1

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab					
C5-C8 Aliphatics	ND		mg/kg	4.92	1
C9-C12 Aliphatics	ND		mg/kg	4.92	1
C9-C10 Aromatics	ND		mg/kg	4.92	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	4.92	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	4.92	1
Benzene	ND		mg/kg	0.197	1
Toluene	ND		mg/kg	0.197	1
Ethylbenzene	ND		mg/kg	0.197	1
p/m-Xylene	ND		mg/kg	0.197	1
o-Xylene	ND		mg/kg	0.197	1
Methyl tert butyl ether	ND		mg/kg	0.098	1
Naphthalene	ND		mg/kg	0.984	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	75		70-130
2,5-Dibromotoluene-FID	77		70-130

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID:	L0907709-05
Client ID:	SE GAS TANK1 NWALL
Sample Location:	SOMERVILLE, MA
Matrix:	Soil
Analytical Method:	61,EPH-04-1
Analytical Date:	06/17/09 19:41
Analyst:	AS
Percent Solids:	86%

Date Collected:	06/10/09 14:40
Date Received:	06/11/09
Field Prep:	Not Specified
Extraction Method:	EPA 3540C
Extraction Date:	06/13/09 12:25
Cleanup Method1:	EPH-04-1
Cleanup Date1:	06/17/09

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab					
C9-C18 Aliphatics	ND		mg/kg	7.75	1
C19-C36 Aliphatics	11.4		mg/kg	7.75	1
C11-C22 Aromatics	17.2		mg/kg	7.75	1
C11-C22 Aromatics, Adjusted	16.4		mg/kg	7.75	1
Naphthalene	ND		mg/kg	0.388	1
2-Methylnaphthalene	ND		mg/kg	0.388	1
Acenaphthylene	ND		mg/kg	0.388	1
Acenaphthene	ND		mg/kg	0.388	1
Fluorene	ND		mg/kg	0.388	1
Phenanthrene	ND		mg/kg	0.388	1
Anthracene	ND		mg/kg	0.388	1
Fluoranthene	ND		mg/kg	0.388	1
Pyrene	ND		mg/kg	0.388	1
Benzo(a)anthracene	ND		mg/kg	0.388	1
Chrysene	ND		mg/kg	0.388	1
Benzo(b)fluoranthene	ND		mg/kg	0.388	1
Benzo(k)fluoranthene	ND		mg/kg	0.388	1
Benzo(a)pyrene	ND		mg/kg	0.388	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.388	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.388	1
Benzo(ghi)perylene	0.758		mg/kg	0.388	1

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-05
Client ID: SE GAS TANK1 NWALL
Sample Location: SOMERVILLE, MA

Date Collected: 06/10/09 14:40
Date Received: 06/11/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	58		40-140
o-Terphenyl	86		40-140
2-Fluorobiphenyl	82		40-140
2-Bromonaphthalene	83		40-140

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-06
Client ID: SW GAS TANK2 SWALL
Sample Location: SOMERVILLE, MA
Matrix: Soil
Analytical Method: 59,VPH-04-1.1
Analytical Date: 06/13/09 01:14
Analyst: RC
Percent Solids: 88%

Date Collected: 06/10/09 15:30
Date Received: 06/11/09
Field Prep: Not Specified

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1.6:1

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab					
C5-C8 Aliphatics	363		mg/kg	52.3	10
C9-C12 Aliphatics	428		mg/kg	52.3	10
C9-C10 Aromatics	170		mg/kg	52.3	10
C5-C8 Aliphatics, Adjusted	357		mg/kg	52.3	10
C9-C12 Aliphatics, Adjusted	232		mg/kg	52.3	10
Benzene	ND		mg/kg	2.09	10
Toluene	5.91		mg/kg	2.09	10
Ethylbenzene	ND		mg/kg	2.09	10
p/m-Xylene	17.8		mg/kg	2.09	10
o-Xylene	7.58		mg/kg	2.09	10
Methyl tert butyl ether	ND		mg/kg	1.04	10
Naphthalene	ND		mg/kg	10.4	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	102		70-130
2,5-Dibromotoluene-FID	102		70-130

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID:	L0907709-06
Client ID:	SW GAS TANK2 SWALL
Sample Location:	SOMERVILLE, MA
Matrix:	Soil
Analytical Method:	61,EPH-04-1
Analytical Date:	06/17/09 16:37
Analyst:	AS
Percent Solids:	88%

Date Collected:	06/10/09 15:30
Date Received:	06/11/09
Field Prep:	Not Specified
Extraction Method:	EPA 3540C
Extraction Date:	06/13/09 12:25
Cleanup Method1:	EPH-04-1
Cleanup Date1:	06/17/09

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab					
C9-C18 Aliphatics	ND		mg/kg	7.58	1
C19-C36 Aliphatics	8.48		mg/kg	7.58	1
C11-C22 Aromatics	11.2		mg/kg	7.58	1
C11-C22 Aromatics, Adjusted	11.2		mg/kg	7.58	1
Naphthalene	ND		mg/kg	0.379	1
2-Methylnaphthalene	ND		mg/kg	0.379	1
Acenaphthylene	ND		mg/kg	0.379	1
Acenaphthene	ND		mg/kg	0.379	1
Fluorene	ND		mg/kg	0.379	1
Phenanthrene	ND		mg/kg	0.379	1
Anthracene	ND		mg/kg	0.379	1
Fluoranthene	ND		mg/kg	0.379	1
Pyrene	ND		mg/kg	0.379	1
Benzo(a)anthracene	ND		mg/kg	0.379	1
Chrysene	ND		mg/kg	0.379	1
Benzo(b)fluoranthene	ND		mg/kg	0.379	1
Benzo(k)fluoranthene	ND		mg/kg	0.379	1
Benzo(a)pyrene	ND		mg/kg	0.379	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.379	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.379	1
Benzo(ghi)perylene	ND		mg/kg	0.379	1

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-06
Client ID: SW GAS TANK2 SWALL
Sample Location: SOMERVILLE, MA

Date Collected: 06/10/09 15:30
Date Received: 06/11/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	65		40-140
o-Terphenyl	90		40-140
2-Fluorobiphenyl	91		40-140
2-Bromonaphthalene	91		40-140

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-07
Client ID: SW GAS TANK2 BASE
Sample Location: SOMERVILLE, MA
Matrix: Soil
Analytical Method: 59,VPH-04-1.1
Analytical Date: 06/12/09 21:09
Analyst: RC
Percent Solids: 91%

Date Collected: 06/10/09 15:10
Date Received: 06/11/09
Field Prep: Not Specified

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	2.1:1

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab					
C5-C8 Aliphatics	ND		mg/kg	6.44	1
C9-C12 Aliphatics	ND		mg/kg	6.44	1
C9-C10 Aromatics	ND		mg/kg	6.44	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	6.44	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	6.44	1
Benzene	ND		mg/kg	0.258	1
Toluene	ND		mg/kg	0.258	1
Ethylbenzene	ND		mg/kg	0.258	1
p/m-Xylene	ND		mg/kg	0.258	1
o-Xylene	ND		mg/kg	0.258	1
Methyl tert butyl ether	ND		mg/kg	0.129	1
Naphthalene	ND		mg/kg	1.29	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	85		70-130
2,5-Dibromotoluene-FID	86		70-130

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID:	L0907709-07
Client ID:	SW GAS TANK2 BASE
Sample Location:	SOMERVILLE, MA
Matrix:	Soil
Analytical Method:	61,EPH-04-1
Analytical Date:	06/17/09 16:06
Analyst:	AS
Percent Solids:	91%

Date Collected:	06/10/09 15:10
Date Received:	06/11/09
Field Prep:	Not Specified
Extraction Method:	EPA 3540C
Extraction Date:	06/13/09 12:25
Cleanup Method1:	EPH-04-1
Cleanup Date1:	06/17/09

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab					
C9-C18 Aliphatics	ND		mg/kg	7.33	1
C19-C36 Aliphatics	ND		mg/kg	7.33	1
C11-C22 Aromatics	ND		mg/kg	7.33	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	7.33	1
Naphthalene	ND		mg/kg	0.366	1
2-Methylnaphthalene	ND		mg/kg	0.366	1
Acenaphthylene	ND		mg/kg	0.366	1
Acenaphthene	ND		mg/kg	0.366	1
Fluorene	ND		mg/kg	0.366	1
Phenanthrene	ND		mg/kg	0.366	1
Anthracene	ND		mg/kg	0.366	1
Fluoranthene	ND		mg/kg	0.366	1
Pyrene	ND		mg/kg	0.366	1
Benzo(a)anthracene	ND		mg/kg	0.366	1
Chrysene	ND		mg/kg	0.366	1
Benzo(b)fluoranthene	ND		mg/kg	0.366	1
Benzo(k)fluoranthene	ND		mg/kg	0.366	1
Benzo(a)pyrene	ND		mg/kg	0.366	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.366	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.366	1
Benzo(ghi)perylene	ND		mg/kg	0.366	1

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-07
Client ID: SW GAS TANK2 BASE
Sample Location: SOMERVILLE, MA

Date Collected: 06/10/09 15:10
Date Received: 06/11/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	58		40-140
o-Terphenyl	86		40-140
2-Fluorobiphenyl	94		40-140
2-Bromonaphthalene	95		40-140

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-08
Client ID: SW GAS TANK2 NWALL
Sample Location: SOMERVILLE, MA
Matrix: Soil
Analytical Method: 59,VPH-04-1.1
Analytical Date: 06/15/09 16:55
Analyst: RC
Percent Solids: 83%

Date Collected: 06/10/09 15:20
Date Received: 06/11/09
Field Prep: Not Specified

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1.7:1

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab					
C5-C8 Aliphatics	ND		mg/kg	6.12	1
C9-C12 Aliphatics	8.77		mg/kg	6.12	1
C9-C10 Aromatics	ND		mg/kg	6.12	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	6.12	1
C9-C12 Aliphatics, Adjusted	8.16		mg/kg	6.12	1
Benzene	ND		mg/kg	0.245	1
Toluene	0.307		mg/kg	0.245	1
Ethylbenzene	ND		mg/kg	0.245	1
p/m-Xylene	0.618		mg/kg	0.245	1
o-Xylene	ND		mg/kg	0.245	1
Methyl tert butyl ether	ND		mg/kg	0.122	1
Naphthalene	ND		mg/kg	1.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	89		70-130
2,5-Dibromotoluene-FID	89		70-130

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID:	L0907709-08
Client ID:	SW GAS TANK2 NWALL
Sample Location:	SOMERVILLE, MA
Matrix:	Soil
Analytical Method:	61,EPH-04-1
Analytical Date:	06/17/09 20:12
Analyst:	AS
Percent Solids:	83%

Date Collected:	06/10/09 15:20
Date Received:	06/11/09
Field Prep:	Not Specified
Extraction Method:	EPA 3540C
Extraction Date:	06/13/09 12:25
Cleanup Method1:	EPH-04-1
Cleanup Date1:	06/17/09

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab					
C9-C18 Aliphatics	11.8		mg/kg	8.03	1
C19-C36 Aliphatics	54.8		mg/kg	8.03	1
C11-C22 Aromatics	71.1		mg/kg	8.03	1
C11-C22 Aromatics, Adjusted	63.6		mg/kg	8.03	1
Naphthalene	ND		mg/kg	0.402	1
2-Methylnaphthalene	ND		mg/kg	0.402	1
Acenaphthylene	ND		mg/kg	0.402	1
Acenaphthene	ND		mg/kg	0.402	1
Fluorene	ND		mg/kg	0.402	1
Phenanthrene	0.512		mg/kg	0.402	1
Anthracene	ND		mg/kg	0.402	1
Fluoranthene	1.01		mg/kg	0.402	1
Pyrene	0.839		mg/kg	0.402	1
Benzo(a)anthracene	0.611		mg/kg	0.402	1
Chrysene	0.950		mg/kg	0.402	1
Benzo(b)fluoranthene	0.758		mg/kg	0.402	1
Benzo(k)fluoranthene	0.585		mg/kg	0.402	1
Benzo(a)pyrene	0.599		mg/kg	0.402	1
Indeno(1,2,3-cd)Pyrene	0.532		mg/kg	0.402	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.402	1
Benzo(ghi)perylene	1.02		mg/kg	0.402	1

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-08
Client ID: SW GAS TANK2 NWALL
Sample Location: SOMERVILLE, MA

Date Collected: 06/10/09 15:20
Date Received: 06/11/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	71		40-140
o-Terphenyl	108		40-140
2-Fluorobiphenyl	95		40-140
2-Bromonaphthalene	98		40-140

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-09
Client ID: SW GAS TANK2 EWALL
Sample Location: SOMERVILLE, MA
Matrix: Soil
Analytical Method: 59,VPH-04-1.1
Analytical Date: 06/15/09 17:46
Analyst: RC
Percent Solids: 85%

Date Collected: 06/10/09 15:15
Date Received: 06/11/09
Field Prep: Not Specified

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1.5:1

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab					
C5-C8 Aliphatics	ND		mg/kg	5.29	1
C9-C12 Aliphatics	ND		mg/kg	5.29	1
C9-C10 Aromatics	ND		mg/kg	5.29	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	5.29	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	5.29	1
Benzene	ND		mg/kg	0.212	1
Toluene	ND		mg/kg	0.212	1
Ethylbenzene	ND		mg/kg	0.212	1
p/m-Xylene	0.284		mg/kg	0.212	1
o-Xylene	ND		mg/kg	0.212	1
Methyl tert butyl ether	ND		mg/kg	0.106	1
Naphthalene	ND		mg/kg	1.06	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	89		70-130
2,5-Dibromotoluene-FID	90		70-130

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03
Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID:	L0907709-09	Date Collected:	06/10/09 15:15
Client ID:	SW GAS TANK2 EWALL	Date Received:	06/11/09
Sample Location:	SOMERVILLE, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3540C
Analytical Method:	61,EPH-04-1	Extraction Date:	06/13/09 12:25
Analytical Date:	06/17/09 18:39	Cleanup Method1:	EPH-04-1
Analyst:	AS	Cleanup Date1:	06/17/09
Percent Solids:	85%		

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab					
C9-C18 Aliphatics	ND		mg/kg	7.84	1
C19-C36 Aliphatics	12.5		mg/kg	7.84	1
C11-C22 Aromatics	35.6		mg/kg	7.84	1
C11-C22 Aromatics. Adjusted	25.2		mg/kg	7.84	1
Naphthalene	ND		mg/kg	0.392	1
2-Methylnaphthalene	ND		mg/kg	0.392	1
Acenaphthylene	ND		mg/kg	0.392	1
Acenaphthene	ND		mg/kg	0.392	1
Fluorene	ND		mg/kg	0.392	1
Phenanthrene	1.66		mg/kg	0.392	1
Anthracene	ND		mg/kg	0.392	1
Fluoranthene	1.74		mg/kg	0.392	1
Pyrene	1.48		mg/kg	0.392	1
Benzo(a)anthracene	0.698		mg/kg	0.392	1
Chrysene	0.899		mg/kg	0.392	1
Benzo(b)fluoranthene	0.739		mg/kg	0.392	1
Benzo(k)fluoranthene	0.614		mg/kg	0.392	1
Benzo(a)pyrene	0.675		mg/kg	0.392	1
Indeno(1,2,3-cd)Pyrene	0.501		mg/kg	0.392	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.392	1
Benzo(ghi)perylene	1.43		mg/kg	0.392	1

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-09
Client ID: SW GAS TANK2 EWALL
Sample Location: SOMERVILLE, MA

Date Collected: 06/10/09 15:15
Date Received: 06/11/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	78		40-140
o-Terphenyl	102		40-140
2-Fluorobiphenyl	91		40-140
2-Bromonaphthalene	94		40-140

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID:	L0907709-10
Client ID:	SW GAS TANK2 WWALL
Sample Location:	SOMERVILLE, MA
Matrix:	Soil
Analytical Method:	59,VPH-04-1.1
Analytical Date:	06/17/09 17:16
Analyst:	RC
Percent Solids:	84%

Date Collected:	06/10/09 15:35
Date Received:	06/11/09
Field Prep:	Not Specified

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1.5:1

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab					
C5-C8 Aliphatics	30.7		mg/kg	5.38	1
C9-C12 Aliphatics	54.9		mg/kg	5.38	1
C9-C10 Aromatics	23.9		mg/kg	5.38	1
C5-C8 Aliphatics, Adjusted	26.9		mg/kg	5.38	1
C9-C12 Aliphatics, Adjusted	15.4		mg/kg	5.38	1
Benzene	0.790		mg/kg	0.215	1
Toluene	3.01		mg/kg	0.215	1
Ethylbenzene	1.61		mg/kg	0.215	1
p/m-Xylene	10.5		mg/kg	0.215	1
o-Xylene	3.53		mg/kg	0.215	1
Methyl tert butyl ether	ND		mg/kg	0.108	1
Naphthalene	1.74		mg/kg	1.08	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	101		70-130
2,5-Dibromotoluene-FID	103		70-130

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID:	L0907709-10
Client ID:	SW GAS TANK2 WWALL
Sample Location:	SOMERVILLE, MA
Matrix:	Soil
Analytical Method:	61,EPH-04-1
Analytical Date:	06/17/09 17:38
Analyst:	AS
Percent Solids:	84%

Date Collected:	06/10/09 15:35
Date Received:	06/11/09
Field Prep:	Not Specified
Extraction Method:	EPA 3540C
Extraction Date:	06/13/09 12:25
Cleanup Method1:	EPH-04-1
Cleanup Date1:	06/17/09

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab					
C9-C18 Aliphatics	ND		mg/kg	7.94	1
C19-C36 Aliphatics	21.4		mg/kg	7.94	1
C11-C22 Aromatics	19.5		mg/kg	7.94	1
C11-C22 Aromatics, Adjusted	18.6		mg/kg	7.94	1
Naphthalene	ND		mg/kg	0.397	1
2-Methylnaphthalene	ND		mg/kg	0.397	1
Acenaphthylene	ND		mg/kg	0.397	1
Acenaphthene	ND		mg/kg	0.397	1
Fluorene	ND		mg/kg	0.397	1
Phenanthrene	ND		mg/kg	0.397	1
Anthracene	ND		mg/kg	0.397	1
Fluoranthene	ND		mg/kg	0.397	1
Pyrene	ND		mg/kg	0.397	1
Benzo(a)anthracene	ND		mg/kg	0.397	1
Chrysene	ND		mg/kg	0.397	1
Benzo(b)fluoranthene	ND		mg/kg	0.397	1
Benzo(k)fluoranthene	ND		mg/kg	0.397	1
Benzo(a)pyrene	ND		mg/kg	0.397	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.397	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.397	1
Benzo(ghi)perylene	0.875		mg/kg	0.397	1

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-10
Client ID: SW GAS TANK2 WWALL
Sample Location: SOMERVILLE, MA

Date Collected: 06/10/09 15:35
Date Received: 06/11/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	68		40-140
o-Terphenyl	93		40-140
2-Fluorobiphenyl	83		40-140
2-Bromonaphthalene	85		40-140

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-11
Client ID: WEST GT BASE
Sample Location: SOMERVILLE, MA
Matrix: Soil
Analytical Method: 59,VPH-04-1.1
Analytical Date: 06/15/09 19:29
Analyst: RC
Percent Solids: 92%

Date Collected: 06/10/09 13:04
Date Received: 06/11/09
Field Prep: Not Specified

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1:1 +/- 25%

Volatile Petroleum Hydrocarbons - Westborough Lab

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
C5-C8 Aliphatics	ND		mg/kg	3.08	1
C9-C12 Aliphatics	3.72		mg/kg	3.08	1
C9-C10 Aromatics	ND		mg/kg	3.08	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	3.08	1
C9-C12 Aliphatics, Adjusted	3.59		mg/kg	3.08	1
Benzene	ND		mg/kg	0.123	1
Toluene	ND		mg/kg	0.123	1
Ethylbenzene	ND		mg/kg	0.123	1
p/m-Xylene	0.124		mg/kg	0.123	1
o-Xylene	ND		mg/kg	0.123	1
Methyl tert butyl ether	ND		mg/kg	0.062	1
Naphthalene	ND		mg/kg	0.616	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	90		70-130
2,5-Dibromotoluene-FID	90		70-130

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID:	L0907709-11
Client ID:	WEST GT BASE
Sample Location:	SOMERVILLE, MA
Matrix:	Soil
Analytical Method:	61,EPH-04-1
Analytical Date:	06/17/09 18:08
Analyst:	AS
Percent Solids:	92%

Date Collected:	06/10/09 13:04
Date Received:	06/11/09
Field Prep:	Not Specified
Extraction Method:	EPA 3540C
Extraction Date:	06/13/09 12:32
Cleanup Method1:	EPH-04-1
Cleanup Date1:	06/17/09

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab					
C9-C18 Aliphatics	ND		mg/kg	7.25	1
C19-C36 Aliphatics	ND		mg/kg	7.25	1
C11-C22 Aromatics	ND		mg/kg	7.25	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	7.25	1
Naphthalene	ND		mg/kg	0.362	1
2-Methylnaphthalene	ND		mg/kg	0.362	1
Acenaphthylene	ND		mg/kg	0.362	1
Acenaphthene	ND		mg/kg	0.362	1
Fluorene	ND		mg/kg	0.362	1
Phenanthrene	ND		mg/kg	0.362	1
Anthracene	ND		mg/kg	0.362	1
Fluoranthene	ND		mg/kg	0.362	1
Pyrene	ND		mg/kg	0.362	1
Benzo(a)anthracene	ND		mg/kg	0.362	1
Chrysene	ND		mg/kg	0.362	1
Benzo(b)fluoranthene	ND		mg/kg	0.362	1
Benzo(k)fluoranthene	ND		mg/kg	0.362	1
Benzo(a)pyrene	ND		mg/kg	0.362	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.362	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.362	1
Benzo(ghi)perylene	ND		mg/kg	0.362	1

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-11
Client ID: WEST GT BASE
Sample Location: SOMERVILLE, MA

Date Collected: 06/10/09 13:04
Date Received: 06/11/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	63		40-140
o-Terphenyl	99		40-140
2-Fluorobiphenyl	91		40-140
2-Bromonaphthalene	91		40-140

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

Method Blank Analysis
Batch Quality Control

Analytical Method: 59,VPH-04-1.1
Analytical Date: 06/12/09 10:18
Analyst: RC

Parameter	Result	Qualifier	Units	RDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 01-07 Batch: WG366555-3				
C5-C8 Aliphatics	ND		mg/kg	2.67
C9-C12 Aliphatics	ND		mg/kg	2.67
C9-C10 Aromatics	ND		mg/kg	2.67
C5-C8 Aliphatics, Adjusted	ND		mg/kg	2.67
C9-C12 Aliphatics, Adjusted	ND		mg/kg	2.67
Benzene	ND		mg/kg	0.107
Toluene	ND		mg/kg	0.107
Ethylbenzene	ND		mg/kg	0.107
p/m-Xylene	ND		mg/kg	0.107
o-Xylene	ND		mg/kg	0.107
Methyl tert butyl ether	ND		mg/kg	0.053
Naphthalene	ND		mg/kg	0.533

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	92		70-130
2,5-Dibromotoluene-FID	97		70-130

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

Method Blank Analysis
Batch Quality Control

Analytical Method: 61,EPH-04-1
Analytical Date: 06/15/09 15:27
Analyst: AS

Extraction Method: EPA 3540C
Extraction Date: 06/13/09 12:25
Cleanup Method1: EPH-04-1
Cleanup Date1: 06/15/09

Parameter	Result	Qualifier	Units	RDL
Extractable Petroleum Hydrocarbons - Westborough Lab for sample(s): 01-11 Batch: WG366739-1				
C9-C18 Aliphatics	ND		mg/kg	6.67
C19-C36 Aliphatics	ND		mg/kg	6.67
C11-C22 Aromatics	ND		mg/kg	6.67
C11-C22 Aromatics, Adjusted	ND		mg/kg	6.67
Naphthalene	ND		mg/kg	0.333
2-Methylnaphthalene	ND		mg/kg	0.333
Acenaphthylene	ND		mg/kg	0.333
Acenaphthene	ND		mg/kg	0.333
Fluorene	ND		mg/kg	0.333
Phenanthrene	ND		mg/kg	0.333
Anthracene	ND		mg/kg	0.333
Fluoranthene	ND		mg/kg	0.333
Pyrene	ND		mg/kg	0.333
Benzo(a)anthracene	ND		mg/kg	0.333
Chrysene	ND		mg/kg	0.333
Benzo(b)fluoranthene	ND		mg/kg	0.333
Benzo(k)fluoranthene	ND		mg/kg	0.333
Benzo(a)pyrene	ND		mg/kg	0.333
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.333
Dibenzo(a,h)anthracene	ND		mg/kg	0.333
Benzo(ghi)perylene	ND		mg/kg	0.333

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	45		40-140
o-Terphenyl	94		40-140
2-Fluorobiphenyl	91		40-140
2-Bromonaphthalene	93		40-140

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

Method Blank Analysis
Batch Quality Control

Analytical Method: 59,VPH-04-1.1
Analytical Date: 06/15/09 10:53
Analyst: RC

Parameter	Result	Qualifier	Units	RDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 08-09,11 Batch: WG366799-3				
C5-C8 Aliphatics	ND		mg/kg	2.67
C9-C12 Aliphatics	ND		mg/kg	2.67
C9-C10 Aromatics	ND		mg/kg	2.67
C5-C8 Aliphatics, Adjusted	ND		mg/kg	2.67
C9-C12 Aliphatics, Adjusted	ND		mg/kg	2.67
Benzene	ND		mg/kg	0.107
Toluene	ND		mg/kg	0.107
Ethylbenzene	ND		mg/kg	0.107
p/m-Xylene	ND		mg/kg	0.107
o-Xylene	ND		mg/kg	0.107
Methyl tert butyl ether	ND		mg/kg	0.053
Naphthalene	ND		mg/kg	0.533

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	95		70-130
2,5-Dibromotoluene-FID	95		70-130

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

Method Blank Analysis
Batch Quality Control

Analytical Method: 59,VPH-04-1.1
Analytical Date: 06/17/09 12:32
Analyst: RC

Parameter	Result	Qualifier	Units	RDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 10 Batch: WG367183-3				
C5-C8 Aliphatics	ND		mg/kg	2.67
C9-C12 Aliphatics	ND		mg/kg	2.67
C9-C10 Aromatics	ND		mg/kg	2.67
C5-C8 Aliphatics, Adjusted	ND		mg/kg	2.67
C9-C12 Aliphatics, Adjusted	ND		mg/kg	2.67
Benzene	ND		mg/kg	0.107
Toluene	ND		mg/kg	0.107
Ethylbenzene	ND		mg/kg	0.107
p/m-Xylene	ND		mg/kg	0.107
o-Xylene	ND		mg/kg	0.107
Methyl tert butyl ether	ND		mg/kg	0.053
Naphthalene	ND		mg/kg	0.533

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	98		70-130
2,5-Dibromotoluene-FID	100		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 515 SOMERVILLE AVE.

Project Number: 2315.03

Lab Number: L0907709

Report Date: 06/18/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-07 Batch: WG366555-1 WG366555-2					
C5-C8 Aliphatics	81	83	70-130	2	25
C9-C12 Aliphatics	91	91	70-130	0	25
C9-C10 Aromatics	92	92	70-130	1	25
Benzene	86	86	70-130	0	25
Toluene	89	88	70-130	1	25
Ethylbenzene	91	89	70-130	1	25
p/m-Xylene	91	90	70-130	2	25
o-Xylene	90	89	70-130	2	25
Methyl tert butyl ether	80	80	70-130	0	25
Naphthalene	95	91	70-130	5	25
1,2,4-Trimethylbenzene	92	91	70-130	2	25
Pentane	75	74	70-130	1	25
2-Methylpentane	82	80	70-130	3	25
2,2,4-Trimethylpentane	96	95	70-130	2	25
n-Nonane	105	104	30-130	1	25
n-Decane	106	105	70-130	1	25
n-Butylcyclohexane	104	104	70-130	0	25

Lab Control Sample Analysis

Batch Quality Control

Project Name: 515 SOMERVILLE AVE.

Project Number: 2315.03

Lab Number: L0907709

Report Date: 06/18/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-07 Batch: WG366555-1 WG366555-2					

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	95		92		70-130
2,5-Dibromotoluene-FID	97		96		70-130

Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-11 Batch: WG366739-2 WG366739-3					
C9-C18 Aliphatics	44	50	40-140	13	25
C19-C36 Aliphatics	62	65	40-140	5	25
C11-C22 Aromatics	78	80	40-140	3	25
Naphthalene	55	68	40-140	21	25
2-Methylnaphthalene	60	72	40-140	18	25
Acenaphthylene	64	74	40-140	14	25
Acenaphthene	62	71	40-140	14	25
Fluorene	67	75	40-140	11	25
Phenanthrene	82	86	40-140	5	25

Lab Control Sample Analysis

Batch Quality Control

Project Name: 515 SOMERVILLE AVE.

Project Number: 2315.03

Lab Number: L0907709

Report Date: 06/18/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-11 Batch: WG366739-2 WG366739-3					
Anthracene	82	84	40-140	2	25
Fluoranthene	87	86	40-140	1	25
Pyrene	88	86	40-140	2	25
Benzo(a)anthracene	87	84	40-140	4	25
Chrysene	87	84	40-140	4	25
Benzo(b)fluoranthene	84	82	40-140	2	25
Benzo(k)fluoranthene	84	82	40-140	2	25
Benzo(a)pyrene	83	80	40-140	4	25
Indeno(1,2,3-cd)Pyrene	82	80	40-140	2	25
Dibenzo(a,h)anthracene	80	79	40-140	1	25
Benzo(ghi)perylene	81	78	40-140	4	25
Nonane (C9)	32	42	30-140	**27**	25
Decane (C10)	40	49	40-140	20	25
Dodecane (C12)	45	52	40-140	14	25
Tetradecane (C14)	48	53	40-140	10	25
Hexadecane (C16)	50	56	40-140	11	25
Octadecane (C18)	56	60	40-140	7	25
Nonadecane (C19)	60	63	40-140	5	25
Eicosane (C20)	63	65	40-140	3	25
Docosane (C22)	67	69	40-140	3	25
Tetracosane (C24)	69	71	40-140	3	25

Lab Control Sample Analysis

Batch Quality Control

Project Name: 515 SOMERVILLE AVE.

Project Number: 2315.03

Lab Number: L0907709

Report Date: 06/18/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-11 Batch: WG366739-2 WG366739-3					
Hexacosane (C26)	69	72	40-140	4	25
Octacosane (C28)	68	71	40-140	4	25
Triacontane (C30)	70	74	40-140	6	25
Hexatriacontane (C36)	72	77	40-140	7	25

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	75		76		40-140
o-Terphenyl	96		94		40-140
2-Fluorobiphenyl	87		87		40-140
2-Bromonaphthalene	90		89		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 515 SOMERVILLE AVE.

Project Number: 2315.03

Lab Number: L0907709

Report Date: 06/18/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 08-09,11 Batch: WG366799-1 WG366799-2					
C5-C8 Aliphatics	115	118	70-130	3	25
C9-C12 Aliphatics	95	98	70-130	3	25
C9-C10 Aromatics	100	100	70-130	0	25
Benzene	99	101	70-130	2	25
Toluene	98	100	70-130	2	25
Ethylbenzene	98	100	70-130	2	25
p/m-Xylene	99	100	70-130	1	25
o-Xylene	98	98	70-130	1	25
Methyl tert butyl ether	94	99	70-130	5	25
Naphthalene	101	101	70-130	0	25
1,2,4-Trimethylbenzene	99	100	70-130	1	25
Pentane	123	124	70-130	1	25
2-Methylpentane	116	119	70-130	3	25
2,2,4-Trimethylpentane	112	114	70-130	2	25
n-Nonane	111	114	30-130	3	25
n-Decane	108	112	70-130	4	25
n-Butylcyclohexane	109	111	70-130	2	25

Lab Control Sample Analysis

Batch Quality Control

Project Name: 515 SOMERVILLE AVE.

Project Number: 2315.03

Lab Number: L0907709

Report Date: 06/18/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 08-09,11 Batch: WG366799-1 WG366799-2					

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	103		101		70-130
2,5-Dibromotoluene-FID	104		102		70-130

Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 10 Batch: WG367183-1 WG367183-2					
C5-C8 Aliphatics	96	101	70-130	5	25
C9-C12 Aliphatics	84	89	70-130	6	25
C9-C10 Aromatics	95	97	70-130	3	25
Benzene	92	94	70-130	3	25
Toluene	91	94	70-130	3	25
Ethylbenzene	93	95	70-130	2	25
p/m-Xylene	94	95	70-130	2	25
o-Xylene	92	94	70-130	2	25
Methyl tert butyl ether	86	92	70-130	7	25

Lab Control Sample Analysis

Batch Quality Control

Project Name: 515 SOMERVILLE AVE.

Project Number: 2315.03

Lab Number: L0907709

Report Date: 06/18/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 10 Batch: WG367183-1 WG367183-2					
Naphthalene	99	104	70-130	5	25
1,2,4-Trimethylbenzene	94	96	70-130	2	25
Pentane	104	96	70-130	8	25
2-Methylpentane	101	103	70-130	2	25
2,2,4-Trimethylpentane	102	106	70-130	4	25
n-Nonane	102	107	30-130	5	25
n-Decane	94	101	70-130	8	25
n-Butylcyclohexane	100	104	70-130	4	25

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	99		103		70-130
2,5-Dibromotoluene-FID	99		104		70-130

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

Fractionation Check Standard Quality Control

Fractionation check standard for 200818205

Parameter	% Recovery	QC Criteria
C9-C18 Aliphatics	77	40-140
C19-C36 Aliphatics	76	40-140
C11-C22 Aromatics	86	40-140
Naphthalene	82	40-140
2-Methylnaphthalene	78	40-140
Acenaphthylene	76	40-140
Acenaphthene	80	40-140
Fluorene	79	40-140
Phenanthrene	78	40-140
Anthracene	82	40-140
Fluoranthene	84	40-140
Pyrene	84	40-140
Benzo(a)anthracene	82	40-140
Chrysene	88	40-140
Benzo(b)fluoranthene	81	40-140
Benzo(k)fluoranthene	97	40-140
Benzo(a)pyrene	78	40-140
Indeno(1,2,3-cd)Pyrene	76	40-140
Dibenzo(a,h)anthracene	83	40-140
Benzo(g,h,i)perylene	82	40-140
Nonane	72	30-140
Decane	77	40-140
Dodecane	80	40-140
Tetradecane	76	40-140
Hexadecane	78	40-140
Octadecane	76	40-140
Nonadecane	75	40-140
Eicosane	77	40-140
Docosane	79	40-140
Tetracosane	83	40-140
Hexacosane	78	40-140
Octacosane	77	40-140
Triacontane	76	40-140
Hexatriacontane	75	40-140
% Naphthalene Breakthrough	0	0-5
% 2-Methylnaphthalene Breakthrough	0	0-5

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

Fractionation Check Standard
Quality Control

Fractionation check standard for 200818205

Surrogate	% Recovery	QC Criteria
Chloro-Octadecane	66	40-140
o-Terphenyl	83	40-140
2-Fluorobiphenyl	75	40-140
2-Bromonaphthalene	76	40-140

INORGANICS
&
MISCELLANEOUS

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-01
Client ID: SE GAS TANK1 SWALL
Sample Location: SOMERVILLE, MA
Matrix: Soil

Date Collected: 06/10/09 14:28
Date Received: 06/11/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab									
Solids, Total	82		%	0.10	1	-	06/12/09 15:50	30,2540G	SD

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-02
Client ID: SE GAS TANK1 BASE
Sample Location: SOMERVILLE, MA
Matrix: Soil

Date Collected: 06/10/09 14:43
Date Received: 06/11/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab									
Solids, Total	82		%	0.10	1	-	06/12/09 15:50	30,2540G	SD

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-03
Client ID: SE GAS TANK1 EWALL
Sample Location: SOMERVILLE, MA
Matrix: Soil

Date Collected: 06/10/09 14:25
Date Received: 06/11/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab									
Solids, Total	79		%	0.10	1	-	06/12/09 15:50	30,2540G	SD

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-04
Client ID: SE GAS TANK1 WWALL
Sample Location: SOMERVILLE, MA
Matrix: Soil

Date Collected: 06/10/09 14:36
Date Received: 06/11/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab									
Solids, Total	82		%	0.10	1	-	06/12/09 15:50	30,2540G	SD

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-05
Client ID: SE GAS TANK1 NWALL
Sample Location: SOMERVILLE, MA
Matrix: Soil

Date Collected: 06/10/09 14:40
Date Received: 06/11/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab									
Solids, Total	86		%	0.10	1	-	06/12/09 15:50	30,2540G	SD

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-06
Client ID: SW GAS TANK2 SWALL
Sample Location: SOMERVILLE, MA
Matrix: Soil

Date Collected: 06/10/09 15:30
Date Received: 06/11/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab									
Solids, Total	88		%	0.10	1	-	06/12/09 15:50	30,2540G	SD

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-07
Client ID: SW GAS TANK2 BASE
Sample Location: SOMERVILLE, MA
Matrix: Soil

Date Collected: 06/10/09 15:10
Date Received: 06/11/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab									
Solids, Total	91		%	0.10	1	-	06/12/09 15:50	30,2540G	SD

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-08
Client ID: SW GAS TANK2 NWALL
Sample Location: SOMERVILLE, MA
Matrix: Soil

Date Collected: 06/10/09 15:20
Date Received: 06/11/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab									
Solids, Total	83		%	0.10	1	-	06/12/09 15:50	30,2540G	SD

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-09
Client ID: SW GAS TANK2 EWALL
Sample Location: SOMERVILLE, MA
Matrix: Soil

Date Collected: 06/10/09 15:15
Date Received: 06/11/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab									
Solids, Total	85		%	0.10	1	-	06/12/09 15:50	30,2540G	SD

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-10
Client ID: SW GAS TANK2 WWALL
Sample Location: SOMERVILLE, MA
Matrix: Soil

Date Collected: 06/10/09 15:35
Date Received: 06/11/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab									
Solids, Total	84		%	0.10	1	-	06/12/09 15:50	30,2540G	SD

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

SAMPLE RESULTS

Lab ID: L0907709-11
Client ID: WEST GT BASE
Sample Location: SOMERVILLE, MA
Matrix: Soil

Date Collected: 06/10/09 13:04
Date Received: 06/11/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab									
Solids, Total	92		%	0.10	1	-	06/12/09 15:50	30,2540G	SD

Lab Duplicate Analysis
Batch Quality Control

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-11 QC Batch ID: WG366648-1 QC Sample: L0907709-01 Client ID: SE GAS TANK1 SWALL					
Solids, Total	82	82	%	0	20

Project Name: 515 SOMERVILLE AVE.
Project Number: 2315.03

Lab Number: L0907709
Report Date: 06/18/09

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0907709-01A	Amber 120ml unpreserved	A	N/A	4.4	Y	Absent	VPH-DELUX-04(28)
L0907709-01B	Amber 120ml unpreserved	A	N/A	4.4	Y	Absent	EPH-DELUX-04(14),TS(7)
L0907709-02A	Amber 120ml unpreserved	A	N/A	4.4	Y	Absent	VPH-DELUX-04(28)
L0907709-02B	Amber 120ml unpreserved	A	N/A	4.4	Y	Absent	EPH-DELUX-04(14),TS(7)
L0907709-03A	Amber 120ml unpreserved	A	N/A	4.4	Y	Absent	VPH-DELUX-04(28)
L0907709-03B	Amber 120ml unpreserved	A	N/A	4.4	Y	Absent	EPH-DELUX-04(14),TS(7)
L0907709-04A	Amber 120ml unpreserved	A	N/A	4.4	Y	Absent	VPH-DELUX-04(28)
L0907709-04B	Amber 120ml unpreserved	A	N/A	4.4	Y	Absent	EPH-DELUX-04(14),TS(7)
L0907709-05A	Amber 120ml unpreserved	A	N/A	4.4	Y	Absent	VPH-DELUX-04(28)
L0907709-05B	Amber 120ml unpreserved	A	N/A	4.4	Y	Absent	EPH-DELUX-04(14),TS(7)
L0907709-06A	Amber 120ml unpreserved	A	N/A	4.4	Y	Absent	VPH-DELUX-04(28)
L0907709-06B	Amber 120ml unpreserved	A	N/A	4.4	Y	Absent	EPH-DELUX-04(14),TS(7)
L0907709-07A	Amber 120ml unpreserved	A	N/A	4.4	Y	Absent	VPH-DELUX-04(28)
L0907709-07B	Amber 120ml unpreserved	A	N/A	4.4	Y	Absent	EPH-DELUX-04(14),TS(7)
L0907709-08A	Amber 120ml unpreserved	A	N/A	4.4	Y	Absent	VPH-DELUX-04(28)
L0907709-08B	Amber 120ml unpreserved	A	N/A	4.4	Y	Absent	EPH-DELUX-04(14),TS(7)
L0907709-09A	Amber 120ml unpreserved	A	N/A	4.4	Y	Absent	VPH-DELUX-04(28)
L0907709-09B	Amber 120ml unpreserved	A	N/A	4.4	Y	Absent	EPH-DELUX-04(14),TS(7)
L0907709-10A	Amber 120ml unpreserved	A	N/A	4.4	Y	Absent	VPH-DELUX-04(28)
L0907709-10B	Amber 120ml unpreserved	A	N/A	4.4	Y	Absent	EPH-DELUX-04(14),TS(7)
L0907709-11A	Amber 120ml unpreserved	A	N/A	4.4	Y	Absent	VPH-DELUX-04(28)
L0907709-11B	Amber 120ml unpreserved	A	N/A	4.4	Y	Absent	EPH-DELUX-04(14),TS(7)

*Hold days indicated by values in parentheses

Project Name: 515 SOMERVILLE AVE. **Lab Number:** L0907709

Project Number: 2315.03 **Report Date:** 06/18/09

GLOSSARY

Acronyms

EPA · Environmental Protection Agency.

LCS · Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD · Laboratory Control Sample Duplicate: Refer to LCS.

MS · Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD · Matrix Spike Sample Duplicate: Refer to MS.

NA · Not Applicable.

NC · Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

ND · Not detected at the reported detection limit for the sample.

NI · Not Ignitable.

RDL · Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD · Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

* · The batch duplicate RPD exceeds the acceptance criteria. This flag is not applicable when the sample concentrations are less than 5x the RDL. (Metals only.)

A · Spectra identified as "Aldol Condensation Product".

B · The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte.

D · Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E · Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

H · The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

N · The matrix spike recovery exceeds the acceptance criteria. This flag is not applicable when the sample concentration is greater than 4x the spike added. (Metals only.)

P · The RPD between the results for the two columns exceeds the method-specified criteria.

R · Analytical results are from sample re-analysis.

RE · Analytical results are from sample re-extraction.

J · Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

Report Format: Data Usability Report

Project Name: 515 SOMERVILLE AVE. **Lab Number:** L0907709

Project Number: 2315.03 **Report Date:** 06/18/09

REFERENCES

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

59 Method for the Determination of Volatile Petroleum Hydrocarbons (VPH). Massachusetts Department of Environmental Protection, DEA/ORS/BWSC. May 2004, Revision 1.1.

61 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH). Massachusetts Department of Environmental Protection, DEA/ORS/BWSC. May 2004, Revision 1.1.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Woods Hole Labs shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Woods Hole Labs.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised June 17, 2009 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Haloacetic Acids, Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB).)
Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Calcium Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)
Solid Waste/Soil (Inorganic Parameters: Lead in Paint, pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), Reactivity. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.
Drinking Water (Inorganic Parameters: SM9215B, 9221E, 9222B, 9222D, 9223B, EPA 150.1, 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B,4500NO3-F, EPA 200.7, EPA 200.8, 245.1. Organic Parameters: 504.1, 524.2, SM 6251B.)
Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
Drinking Water
Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)
(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Nitrite-N, Fluoride, Sulfate)
353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, EPA 150.1, SM4500H-B.
Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)
(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), SM6251B, 314.0.

Non-Potable Water
Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)
(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Tl,Ti,V,Zn,Ca,Mg,Na,K)
245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Nitrate-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CN-CE, 2540D, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)
(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCB-Water)
600/4-81-045-PCB-Oil

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
Drinking Water
Microbiology Parameters: SM9215B; MF-SM9222B; ENZ. SUB. SM9223; EC-SM9221E; MF-SM9222D; ENZ. SUB. SM9223;

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 110.2, 120.1, 150.1, 300.0, 325.2, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic Parameters: 504.1, 524.2, SM6251B.)
Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 150.1, 300.0, 305.1, 310.1, 325.2, 340.2, 350.1, 350.2, 351.1, 353.2, 354.1, 365.2, 375.4, 376.2, 405.1, 415.1, 420.1, 425.1, 1664A, SW-846 9010, 9030, 9040B, EPA 160.1, 160.2, 160.3, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, 331.0, 110.2, SM2120B, 2510B, 5310C, EPA 150.1, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)
Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.1, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.2/.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

New York Department of Health Certificate/Lab ID: 11148. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9223B, 9222B, 8215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 331.0, SM2320B, EPA 300.0, 325.2, 110.2, SM2120B, 4500CN-E, 4500F-C, EPA 150.1, SM4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1, SM6251B.)
Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, EPA 405.1, SM5210B, EPA 410.4, SM5220D, EPA 305.1, SM2310B-4a, EPA 310.1, SM2320B, EPA 200.7, 300.0, 325.2, LACHAT 10-117-07-1A or B, SM4500Cl-E, EPA 340.2, SM4500F-C, EPA 375.4, SM15 426C, EPA 350.1, 350.2, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO30F, EPA 354.1, SM4500-NO2-B, EPA 365.2, SM4500P-E, EPA 160.3, EPA 160.1, SM2540C, EPA 160.2, SM2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, S\M3500Cr-D, EPA 245.1, 245.2, 7470A, 110.2, SM2120B, 335.2, LACHAT 10-204-00-1-A, EPA 150.1, 9040B, SM4500-HB, EPA 1664A, EPA 415.1, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, EPA 376.2, SM4500S-D, EPA 425.1, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, 8021B, EPA 3510C, 5030B, 9010B, 9030B.)
Solid & Hazardous Waste (Inorganic Parameters: EPA 9040B, 9045C, 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 3005A, 3050B, 3051, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 8021B, 3540C, 3545, 3580, 5030B, 5035.)
Analytical Services Protocol: CLP Volatile Organics, CLP Inorganics, CLP PCB/Pesticides.

Rhode Island Department of Health Certificate/Lab ID: LAO00065. ***NELAP Accredited via NY-DOH.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Non-Potable Water (Organic Parameters: EPA 3510C, 625, 608, 8081A, 8082, 8151A, 8270C, 8330)
Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

CHAIN OF CUSTODY

PAGE 1 OF 2

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

06180916:21

Date Rec'd in Lab: 06/11/09

ALPHA Job #: L0907709

Client Information

Client: Sanborn, Head & Assoc

Address: 1 Technology Park Dr.
Westford, MA 01886

Phone: 978-392-0900

Fax: 978-392-0987

Email: dwood@sanbornhead.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 515 Somerville Ave.

Project Location: Somerville MA

Project #: 2315.03

Project Manager: Durran Wood

ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 06/18/09 Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL

☑ ADEx ☐ Add'l Deliverables

Billing Information

☑ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program: MCP

Criteria: GW-1

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO-

☑ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☑ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

ANALYSIS: EPH, VPH

SAMPLE HANDLING

Filtration
☐ Done
☑ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	EPH	VPH	Sample Specific Comments	TOTAL # BOTTLES
7709 1	SE Gas Tank 1 S Wall	6/10/09	1428	S	SAW	X	X		2
2	SE Gas Tank 1 Base	6/10/09	1443	S	SAW	X	X		2
3	SE Gas Tank 1 E Wall	6/10/09	1425	S	SAW	X	X		2
4	SE Gas Tank 1 W Wall	6/10/09	1436	S	SAW	X	X		2
5	SE Gas Tank 1 N Wall	6/10/09	1440	S	SAW	X	X		2
6	SW Gas Tank 2 S Wall	6/10/09	1530	S	SAW	X	X		2
7	SW Gas Tank 2 Base	6/10/09	1510	S	SAW	X	X		2
8	SW Gas Tank 2 N Wall	6/10/09	1520	S	SAW	X	X		2
9	SW Gas Tank 2 E Wall	6/10/09	1513	S	SAW	X	X		2
10	SW Gas Tank 2 W Wall	6/10/09	1535	S	SAW	X	X		2
	Container Type					A	AV		
	Preservative					A	F		

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	6/10/09 1255	[signature]	6/11/09 1255
[signature]	6/11/09 17:15	[signature]	6/11/09 17:15

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO 01-01 (rev 14-OCT-07)

CHAIN OF CUSTODY PAGE 2 OF 2

ALPHA
WOODS HOLE LABS
WESTBORO, MA TEL. 508-898-9220 FAX: 508-898-9193
RAYNHAM,MA TEL: 508-822-9300 FAX. 508-822-3288

Date Rec'd In Lab: 06/11/09

ALPHA Job #: L0907709

Client Information

Client: Sanborn, Head & Assoc.
Address: 1 Technology Park Dr.
Westford, MA 01886
Phone: 978-392-0900
Fax: 978-392-0987
Email: dwood@sanbornhead.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 515 Somerville Ave
Project Location: Somerville, MA
Project #: 2315.03
Project Manager: Dorcas Wood
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 06/18/09 Time:

Other Project Specific Requirements/Comments/Detection Limits:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria
MCP	GW-1

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: EPH	ANALYSIS: VPH	Sample Specific Comments	TOTAL # BOTTLES
11	West GT Base Temp Trip Blank	6/10/09	13:04	S	SAW	X	X		2 / 1

SAMPLE HANDLING
Filtration
☐ Done
☒ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	A	AV
Preservative	A	F

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
SAW via Fedex	6/10/09 12:55	Morgan Tinsley	6/11/09 1255
Morgan Tinsley	6/11/09 17:15	Lori Wrongfrom	6/11/09 17:15

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORM NO: 01-01 (rev. 10-OCT-05)